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ABSTRACT

Results of a survey of 1984 Pennsylvania college graduates are presented. A total of 47,055 graduates of 145 institutions were surveyed, including the associate, bachelor's, master's, doctoral, and first-professional levels. Information is provided on proportions of graduates in each degree field and level that are: employed full-time in their field of preparation or in another field, employed part-time, serving in the military, employed in Pennsylvania or in another state, unemployed, or pursuing an advanced degree. Detailed analysis of outcomes for selected degree fields are provided. Differences in graduates' activities are identified for the following types of schools: state colleges and universities, state-related, state-aided, private colleges, community colleges, proprietary schools, and state technology schools. Degree field trends for 1977 to 1984 for each degree level, except the associate degree, are also covered. Definitions are included for the 50 two-digit level categories of the Classification of Instructional Programs code that have been used. (SW)

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All Degree Levels In Pennsylvania

1984

Pennsylvania Department of Education 1986

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I. SUMMARY

Purpose

This study examines the postgraduate activities of 1984 graduates at all degree levels. The study answers such questions as:

---- How many graduates were employed? How many graduates were employed in jobs unrelated to their degree? Employed part-time? Unemployed? In military service? Pursuing an advanced degree? Engaged in other activities and therefore not seeking employment?

---- How many employed graduates held full-time jobs in Pennsylvania related to their degree field? How many of these positions were outside of Pennsylvania?

---- How many employed graduates held full-time jobs in Pennsylvania that were unrelated to their degree field? How many of these positions were outside of Pennsylvania?

---- What was the relative employment success for graduates in each of fifty possible major disciplines at each degree level? For selected degree fields within the major disciplines?

---- What changes have there been in degree-related and Pennsylvania full-time employment and in other postgraduate activities during recent years with regard to each type of degree? Each major degree field?

Procedures

This report is based upon information provided by 145 cooperating institutions of higher education in Pennsylvania via an annual survey questionnaire that is mailed out to the reporting institutions in the Fall of the year of graduation. The survey instruments are designed to elicit information on the postgraduate activities of 1984 graduates at each degree level, i.e., associate, baccalaureate, master's, doctoral and first-professional. The data reported by these institutions were gathered by whatever means the responding institution had at its disposal (placement records, mailout questionnaires, etc.) and included data on the number of 1984 graduates for whom data had not been available.

These 145 cooperating institutions constituted 87 percent of the 167 institutions contacted and provided data on 47,055 (67%) of 69,834 1984 degree recipients from these institutions. Fourteen (100.0%) of the fourteen state system universities responded, three (75%) of the four state-related universities responded, nine (75.3%) of the state-aided colleges and universities responded, sixty-six (85.7%) of the private independent colleges and universities responded, fourteen (100.0%) of the fourteen community colleges responded and thirty-eight (84%) of the proprietary institutions responded. The State School of Technology also provided data.

The percentage of students for whom data was available varied with the level of the degree awarded. Data was provided for 68.1 percent of the associate degree graduates of the 145 cooperating institutions, 67.8 percent of the baccalaureate degree graduates, 53.7 percent of the master's degree graduates, 53.1 percent of the doctoral degree graduates, and 94.9 percent of the first-professional degree graduates of these institutions.

The survey forms used for this report asked for data in terms of a six-digit Classification of Instructional Programs (CIP) coding system. This CIP code became the official classification system used by all Pennsylvania institutions of higher education in 1984. The survey forms themselves were computer-generated on the basis of data supplied by the Pennsylvania Department of Education with camera ready copies printed out by a laser printer. As a result, each of these forms listed only those degree programs that had been reported as being offered at that degree level. The five forms, one for each degree level, were as a result much shorter than would otherwise have been the case since no unnecessary space was used to list CIP codes not currently in use.

Results

Compared with 1983, the full-time employment rate for associate degree graduates increased slightly, i.e., from 65.3 percent to 65.9 percent. In addition, there has been a small increase, over time, in the rate of associate degree employment from 63.0 percent in 1977 to 65.9 percent of all graduates in 1984. However, the highest ratio for the period 1977 to 1984 was 71.5 percent in 1979. Between 1983 and 1984 the rate of part-time employment increased from 4.7 to 6.6 percent while the unemployment rate dropped from 10.8 percent to 8.3 percent. Over time, there has been a rise in both part-time employment (4.5 percent in 1977 to 6.6 percent in 1984) and unemployment (4.5 percent in 1977 to 8.3 percent in 1984). The rate of reported unemployment has been as high as 12.1 percent (1982) and as low as 4.2 percent (1979) between 1977 and 1984.

When the employment experiences of the associate degree graduates of 1984 were compared with those of the graduates of 1983 in terms of the proportion of full-time employed graduates finding work related to their degree, it was found that there had been no appreciable change, i.e., 86.2 percent in 1983 compared with 86.1 percent in 1984. Historically, there has been little change in the rate of degree-related employment during the period 1977 to 1984. For example, the full-time, degree-related employment ratio was 87.2 percent in 1977 and, at its highest, 88.2 percent in 1984. In contrast, the proportion of full-time employed associate degree graduates who obtained work in Pennsylvania dropped, between 1983 and 1984, from 88.7 percent to 84.5 percent with the 1984 value being identical to the median for eight reported prior years and was, in fact, only slightly higher than the obtained 1977 ratio of 84.2 percent.

When the results for the baccalaureate graduates of 1984 were compared with those for the baccalaureate graduates of 1983, it was found that the full-time employment rate of these graduates had increased somewhat from 61.7 percent in 1983 to 63.0 percent in 1984. These percentages were not greatly different from the percentage figure of 62.0 percent found for the baccalaureate graduates of 1977 but it should also be remembered that this figure has been as high as 70.3 percent in 1980 and 69.5 percent in 1979 during this time period. In contrast to the above findings, between 1983 and 1984

there was a decrease in both the proportion of graduates with part-time work (6.7% to 5.3%) and the rate of unemployment (13.1% to 10.7%). The obtained part-time employment ratio of 5.3 percent is somewhat lower than the figure of 5.8 percent found in 1977 but it is still higher than the reported ratios for the years 1978 through 1981 where the part-time employment rate actually dropped as low as 4.0 percent (1980). In addition, it was found that the unemployment figure of 10.7 percent for 1984 was substantially lower than the figure of 15.9 percent found in 1977. In fact, the rate of unemployment for baccalaureate graduates has fallen from 15.9 percent in 1977 to 9.6 percent in 1979, then rose to 14.3 percent in 1982 but it has, since 1982, been once again steadily declining.

When the employment experiences of the baccalaureate degree graduates of 1984 were compared with those of the graduates of 1983, in terms of the proportion of full-time employed graduates finding degree-related employment, it was found that there had been a small increase in the proportion obtaining such employment, i.e., 80.6 percent in 1983 compared with 82.3 percent in 1984. Both of these figures are substantially higher than the figure of 75.5 percent for the graduates of 1977. There has, in fact, been a steady increase in this measure since 1981 when the rate was only 75.9 percent. In contrast, the proportion of full-time employed baccalaureate graduates who obtained employment in Pennsylvania fell slightly from 64.9 percent in 1983 to 63.1 percent in 1984, thus continuing a long term trend of continuous decline from 1977's value of 69.6 percent.

The full-time employment rate for the master's degree graduates rose from a value of 74.5 percent in 1983 to a value of 76.5 percent in 1984. Both values were, however, substantially lower than those reported for the years 1977 to 1980 when over eighty percent of the master's degree graduates found full-time employment, e.g., 81.0 percent in 1977 rising to a high of 84.1 percent in 1980. Between 1983 and 1984 the rate of part-time employment also rose from 2.5 percent to 3.9 percent while, in contrast, the unemployment rate for these graduates dropped from 6.0 percent in 1983 to 4.7 percent in 1984. The reported part-time employment rate of 3.9 percent for 1984 is substantially higher than the rate of 2.0 percent found in 1977. Similarly, the 1984 unemployment rate of 4.7 percent is substantially lower than the 1977 rate of 7.3 percent.

When the employment experiences of the master's degree graduates of 1984 were compared with those of the graduates of 1983 in terms of the proportion of full-time employed graduates who had found work that was related to their degree, it was found that this measure had increased from 86.9 percent in 1983 to 89.1 percent in 1984. The 1984 value is more in keeping with the findings for previous years where the obtained figures were typically reported as a value of either 89 or 90 percent. With regard to full-time employment in Pennsylvania, it was found that there was a slight decline in such employment from 66.6 percent in 1983 to 65.7 percent in 1984. This represents a continuation of a pattern of overall decline in Pennsylvania-based employment that has been occurring since 1977, the earliest year for which such data is available.

When the results for the doctoral degree graduates of 1984 were compared with those for the graduates for 1983, it was found that the rate of full-time employment for these graduates had increased from a value of 87.0 percent in 1983 to a value of 92.3 percent in 1984. The 1984 figure of 92.3 percent is the highest proportion obtained to date. As might be expected, the rate of obtaining part-time work correspondingly fell from 4.7 percent in 1983 to a

value of 1.5 percent in 1984 and the rate of unemployment fell from 5.8 percent in 1983 to 3.5 percent in 1984. The part-time employment rate of 1.5 percent is the lowest to date while the unemployment rate for 1984 is, in contrast, not the lowest on record. The lowest unemployment rate for doctoral graduates was 3.2 percent in 1981, and the highest incidence of reported unemployment during the years 1977 to 1984 was 5.0 percent in 1979.

When only those doctoral graduates who obtained full-time employment were considered, the 1984 graduates were seen to have a rate of full-time, degree-related employment that had increased from 91.7 percent in 1983 to a value of 94.7 percent in 1984. Although the latter figure is not the highest rate of degree-related employment obtained to date, it is still substantially higher than the value of 90.3 percent obtained in 1977. The rate of Pennsylvania-based employment for doctoral graduates who had obtained full-time employment was 40.3 percent in 1984, the lowest value obtained to date. This value represents the latest value in a continuing trend toward increasingly lower rates of Pennsylvania-based doctoral degree graduate employment.

When the results for the first-professional graduates of 1984 were compared with those for the graduates of 1983, it was found that the full-time employment rate of these graduates had increased from a value of 81.1 percent in 1983 to a value of 85.4 percent for the graduates of 1984. The figure for 1984, while larger than that for 1983, is still substantially less than those obtained in prior years when, for example, as much as 96.1 percent of the first-professional graduates of both 1981 and 1982 were reported to have obtained full-time employment. The recent lower rates are apparently due to recent declines in the employment ratios for graduates in both Law and Dentistry. The proportion of first-professional graduates obtaining part-time employment fell from 1.4 percent in 1983 to a value of 0.5 percent in 1984. The figure of 0.5 percent is identical to the value obtained for the graduates of 1977 in an earlier report in this series of reports. As might be expected, the rate of unemployment for first-professional graduates is consistently low and relatively constant in value. It was 1.8 percent in 1984, and 1.7 percent in 1983 and 1982 and has, historically, fluctuated between 1.5 and 2.2 percent in 1977. The median value for this measure was 1.8 percent over the eight year period, 1977 to 1984.

When the employment experiences of the first-professional degree graduates of 1984 were then compared with those of the graduates of 1983 in terms of the proportion of full-time employed graduates who had found employment related to their degree field, it was found that there had been a rebound to 97.1 percent in 1984 from the value of 95.2 percent that had been found for the graduates of 1983. Neither of these obtained values was, however, as high as the more typical value of 99 percent that was the typical value obtained prior to 1983.

With regard to the proportion of full-time first-professional graduates who found employment in Pennsylvania, the proportion rose slightly in 1984 from the 1983 value of 57.4 percent to a 1984 value of 57.7 percent. Here again the pattern is one of little change over the years, ranging from 57.1 percent in 1977 to 61.5 percent in 1984 with a median of 57.4 percent over these eight years.

When the employment successes of graduates who actually entered the Civilian Labor Market were examined at the individual degree program level, it was found that the most successful graduates at the associate degree level were those graduates who majored in such fields as: Consumer, Personal, and Miscellaneous Services; Library and Archival Sciences; Physical Sciences; Science Technologies; Parks and Recreation; Precision Production; Construction Trades; Engineering and Engineering-Related Technologies; Marketing and Distribution; Architecture and Environmental Design; Mechanics and Repairers; and the Health Sciences. These degree fields were characterized by a range of full-time, degree-related employment from 100.0 percent down to 75.0 percent.

Similarly, for the baccalaureate graduates of 1984, it was found that the following degree fields ranked at or above seventy-five percent with regard to the proportion finding degree-related employment when they entered the Civilian Labor Market: Vocational Home Economics, Health Sciences (Nursing), Engineering and Engineering-Related Technologies, Architecture and Environmental Design, Engineering, Allied Health Occupations, and Computer and Informational Sciences.

For the master's degree graduates, the highest rates of degree-related employment were found for the degree-fields of: Agribusiness and Agricultural Production, Area and Ethnic Studies, Parks and Recreation, Protective Services, Architecture and Environmental Design, Engineering and Engineering-Related Technologies, Engineering, Multi/Interdisciplinary Studies, Health Sciences, Foreign Languages, Business and Management, Allied Health, Mathematics, Life Sciences, and the Computer and Informational Sciences with the individual rates ranging anywhere from 100.0 percent down to 84.1 percent.

For the doctoral degree graduates it was found that the degree-fields with the highest rates of degree-related employment were: Agribusiness and Agriculture Production, Agricultural Sciences, Renewable Natural Resources, Architecture and Environmental Design, Business and Management, Computer and Informational Sciences, Foreign Languages, Health Sciences, Mathematics, Parks and Recreation, Public Affairs, Visual and Performing Arts, Letters, Education, and Engineering. The lowest of these rates was 92.5 percent and twelve of these fifteen doctoral fields were characterized by a rate of 100.0 percent degree-related employment.

As might be expected, the degree-related employment rates for the first-professional graduates were found to be especially high with the fields of Medicine, Osteopathic Medicine, Pharmacy, Podiatry, and Veterinary Medicine having rates of 100.0 percent employment with only Law (91.2%), Optometry (88.9%), and Dentistry (79.3%) having any degree of reported part-time work or unemployment.

In sum, it would seem that the college and university graduate in most degree fields is still typically able to find degree-related employment and that a college degree, at whatever degree level, remains a viable education goal in today's society.

II. INTRODUCTION

The employment success of higher education graduates is of interest to higher education administrators, especially in times of financial inflation, economic downturn, and dwindling enrollments. Authorized by the Office of Higher Education of the Pennsylvania Department of Education, this report is the twelfth in a series of reports designed to supply information useful to students, counselors, administrators, legislators, and educational planners.

III. HISTORY

This series of reports began as an outcome of a 1972 study commissioned by the Pennsylvania Department of Education and carried out by Dr. William Toombs of the Center for the Study of Higher Education at the Pennsylvania State University. Dr. Toombs' report on the postgraduate activities of the baccalaureate graduates of 1971-72, from 72 degree granting institutions of higher education in Pennsylvania, was so well received and so useful that a decision was made to institute an annual survey of the postgraduate activities of baccalaureate graduates. These annual surveys were to be conducted by the research staff of the Pennsylvania Department of Education.

The first annual survey conducted by the Department of Education was carried out in 1974 using information from the baccalaureate graduates of 1973-74. This survey involved a direct mailing of survey forms to the graduates of 1973-74 utilizing an 18-item, prepaid, postcard return form. Cooperation was received from 86 of 102 institutions. Altogether, 49.3 percent of all graduates of the 86 cooperating institutions responded. This report, indicated that 14.6 percent of the baccalaureate graduates were still seeking employment by late fall of 1974 and that full-time employment had been obtained by 62.3 percent of these graduates. Of the full-time employed graduates, 38.1 percent were found to have jobs that were "highly related" to their degree and 10.1 percent reported that they had "somewhat related" positions. Seventy-four point seven percent of the full-time employed graduates of 1974 reported that they were employed in Pennsylvania.

Continued direct mailing of postcard return forms to the graduates was found to be too formidable a task, given the resources of the Department of Education. As a consequence, a format very similar to that now used was then developed. The placement officer, or other designated responsible officer, of each higher education institution that agreed to cooperate was to provide basic, agreed upon, information that could be used to compile an annual report. Each institution was to utilize the methodology that it felt was most suitable, or practicable, in light of its own needs and limitations. One important change was made; the coverage was expanded to include graduates at all degree levels.

The first in this new series of reports began with the graduates of 1974-75 using data provided by the designated officials of 117 Pennsylvania higher education institutions. Data was made available for 36,026 graduates at all degree levels, representing approximately 40 percent of all Pennsylvania graduates and 66 percent of the graduates of the cooperating institutions.

In that year (1975), 86.9 percent of the associate, 73.6 percent of the baccalaureate, 87.6 percent of the master's, 91.9 percent of the doctoral, and 95.3 percent of the first-professional degree full-time employed graduates were found to have obtained degree-related employment compared with 1984 graduate figures of 86.1 percent for the associate, 82.3 percent for the baccalaureate, 89.1 percent for the master's, 94.7 percent for the doctoral and 97.1 percent for the first-professional degree graduates.

IV. PROCEDURES

Objectives

Answers to the following questions were sought. What proportion of reported 1984 graduates in each degree field, at each degree level, were: (1) employed full-time in their field of preparation, (2) employed full-time in a position other than that for which they were prepared, (3) employed full-time in Pennsylvania, (4) employed part-time, (5) unemployed, (6) in military service, (7) seeking an advanced degree, or (8) engaged in some other activity, i.e., not seeking employment? In addition, the answers to the following questions were sought. What proportion of the 1984 graduates in each degree field, at each degree level, who remained in the civilian labor market were: (1) employed full-time in their field of preparation, (2) employed full-time in a position other than that for which they were prepared, (3) employed full-time in Pennsylvania, (4) employed part-time, or (5) unemployed? How do the answers to these questions compare with those for 1983, or to those for prior years?

Methodology:

The subjects of this study were those who graduated between January 1984 and August 1984 from the 145 institutions of higher education who had provided data on their graduates. Useable data were received for 47,055 (67%) of the 69,834 individuals reported as having graduated during this period from these reporting institutions. In the fall of 1984, survey forms were sent to contact persons in each postsecondary institution that had provided data in prior years. These contact persons were usually career services officers appointed by their institutions to cooperate in this study.

Data collection methods used by the institutions varied with the institution. For example, one college surveys continuously by including a survey card with the employment opening lists that are sent periodically to its graduates. Upon employment, these graduates are asked to complete and return the card. Another institution surveys its graduates at intervals, such as December graduates in March, May graduates in August, and August graduates in September. Other institutions survey all of their graduates around mid-November - with an intensive follow-up by phone in December of nonrespondents. In February intensive follow-up procedures are also initiated by the Department of Education to obtain information from institutions that did not return their survey forms to the Department of Education by the deadline date of February 1.

A major change in the methodology used in this series of reports was the switchover in 1983 from the four-digit Higher Education General Information Survey (HEGIS) codes used in prior reports to the more detailed six-digit

Classification of Instructional Programs (CIP) codes that were formally adopted by the federal government and made effective for all Pennsylvania institutions as of July 1, 1984.

While the new six-digit CIP codes permit a more detailed description of degree-field programs, they also present a problem of continuity with the previous reports prior to 1983. This report, being the second report under the new CIP code system, therefore continues to deal less with time trends and breaks out the data in a different manner than before. The last section of this report, however, does attempt to present data over time for the degree fields categorized in past reports. This was found to be possible for the baccalaureate and higher degrees due to the fairly clearcut continuation of older HEGIS degree-field categories in the new CIP system. In the case of the associate degree fields, however, this has proved to be impossible because of the great changes made in the classification of those degree fields traditionally associated with the associate degree. Time trends for 1983 to 1984 are, however, included for the associate degree and other degrees in the preceding sections of this report.

V. SAMPLING ADEQUACY

As can been seen in Table 0.0 on the following page, the institutional response rate for this report was 76.0 percent, overall, with the independent private colleges and universities having the lowest response rate (66.2%) of any Pennsylvania higher educational sector. The report itself contains information on 47,055 graduates (67.4%) of 69,834 reported associate, baccalaureate, master's, doctoral, and first-professional graduates who graduated in 1984 from 145 cooperating institutions.

In terms of the degree to which the 145 responding institutions were representative of all such institutions, Table 0.0 indicates that the responding institutions constituted 78.0 percent of all such institutions in Pennsylvania. Of the seven sectors, the least well represented (64.4%) were the proprietary schools.

As can be seen in Table 0.1, the adequacy of the returns also varied with the type of degree, i.e., from 53.1 percent for doctoral degree graduates to 94.9 percent for the first-professional degree graduates. In Table 0.2, it is apparent that the adequacy of the returns also varied with the type of institution, i.e., from 56.8 percent for the colleges and universities to 95.7 percent for the proprietary institutions.

In several prior studies of this series of reports no significant differences were found between first-round respondents and non-responding graduates when a follow-up study of the latter was made. Since the present study is similar to its predecessors, the sampling of the respondents is believed likely to be reasonably reflective of all graduates wherever the samples are large relative to all of the graduates in a given response category, e.g., degree field or major discipline.

TABLE 0.0

1984 POSTGRADUATE ACTIVITY SURVEY RESPONSE RATES
AND INSTITUTIONAL SAMPLING RATES BY
TYPE OF INSTITUTION

INSTITUTIONAL TYPE	INSTITUTIONS RESPONDING TO SURVEY	INSTITUTIONS CONTACTED	TOTAL PENNSYLVANIA INSTITUTIONS	INSTITUTIONAL RESPONSE RATE	INSTITUTIONAL SAMPLE SIZE
	#	#	#	(%)	(%)
State System	14	14	14	92.9	100.0
State-Related	3	4	4	100.0	75.0
State-Aided	9	12	12	83.3	75.0
Independent Private	66	77	82	66.2	80.5
Community Colleges	14	14	14	85.7	100.0
Proprietary Schools	38	45	59[2]	80.0	64.4
State School of Technology[1]	1	1	1	100.0	100.0
TOTAL	145	167	186	76.0	78.0

[1]Thaddeus Stevens State School of Technology
[2]Actually, there were 74 separate campuses but only 59 central administrations from whom data could be solicited.

TABLE 0.1

NUMBER OF RETURNS BY TYPE OF DEGREE FOR 1983 GRADUATES
COMPARED WITH THE NUMBER GRADUATED FROM ALL
RESPONDING INSTITUTIONS IN PENNSYLVANIA

DEGREE	DEGREES AWARDED	NUMBER OF RETURNS	PERCENT OF RETURNS
Associate	17,550	11,946	68.1
Baccalaureate	43,539	29,501	67.8
Master's	5,640	3,031	53.7
Doctor's	882	568	53.[illegible]
First-Professional	2,223	2,109	[illegible]
TOTAL	69,834	47,055	67.4

TABLE 0.2

NUMBER OF RETURNS BY INSTITUTIONAL CATEGORY FOR ASSOCIATE DEGREE GRADUATES COMPARED WITH THE NUMBER GRADUATED FROM ALL RESPONDING INSTITUTIONS IN PENNSYLVANIA, 1984

INSTITUTIONAL CATEGORY	ASSOCIATE DEGREE	NUMBER OF RETURNS	PERCENT RETURNS
Colleges and Universities	2,833	1,609	56.8
Community Colleges	10,807	6,645	61.5
Proprietary Institutions	3,771	3,608	95.7
State Technology Schools	139	84	60.4
TOTAL	17,550	11,946	68.1

Table 0.3, which follows, indicates the degree of sampling adequacy for associate degree graduates at the two-digit CIP Code level. Table 0.4 then gives the degree of sampling adequacy of the data provided by each institutional sector, at each degree level above the associate degree, while Table 0.5 does so for each of the basic two-digit (CIP) degree field categories utilized in this report.

In sum, the overall picture is one of an adequate sampling of the basic CIP two-digit level degree field categories with the adequacy of the sampling varying somewhat with the type of responding institution and the degree level in question. The weakest responses were Agribusiness and Agricultural Production graduates (52.6%), Home Economics graduates (45.5%), Vocational Home Economics graduates (51.4%), graduates in Letters (42.9), and Multi/Interdisciplinary Studies graduates (38.5%).

VI. ORGANIZATION OF THIS REPORT

The body of this report consists of tables and narrative concerning findings for: Associate Degree, Baccalaureate Degree, Master's Degree, Doctoral Degree, and First-Professional Degree graduates in addition to findings for the various institutional sectors.

It also provides degree field trends from 1977 to 1984 for each degree level, except the associate degree, using the older HEGIS categories found in prior reports. Appendix A, at the end of this report, gives definitions for each of the 50 two-digit level categories of the Classification of Instructional Programs (CIP) code that have been used in this report. These definitions are for the reader's use in understanding these major discipline areas.

The tables that are listed in Appendix B have been omitted from this report due to the sheer volume of information generated by the six-digit CIP code system. Those having a need for the listed appendix tables may request a copy of those tables that are relevant to their needs. It must be remembered, however, that the number of graduates sampled becomes much smaller when one moves down from the two-digit level of analysis to four- and six-digit degree-field specifications. The Appendix tables, when requested, should be very cautiously and tentatively interpreted by the user who requests them.

TABLE 0.3

NUMBER OF RETURNS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE GRADUATES COMPARED WITH THE NUMBER GRADUATED FROM ALL RESPONDING INSTITUTIONS IN PENNSYLVANIA, 1984*

	MAJOR DISCIPLINE	ASSOCIATE DEGREES	NUMBER OF RETURNS	PERCENT RETURNS
01	Agribusiness and Agricultural Production	116	61	52.6
03	Renewable Natural Resources	77	54	70.1
04	Architecture and Environmental Design	59	57	96.6
06	Business and Management	1,993	1,287	64.6
07	Business and Office	3,071	2,186	71.2
08	Marketing and Distribution	338	263	77.8
09	Communications	107	68	63.6
10	Communications Technologies	182	144	79.1
11	Computer and Information Sciences	686	515	75.1
12	Consumer, Personal, and Miscellaneous Services	31	28	90.3
13	Education	226	165	73.0
14	Engineering	124	81	65.3
15	Engineering and Engineering-Related Technologies	2,945	2,239	76.0
16	Foreign Languages	3	2	66.7
17	Allied Health	1,500	998	66.5
18	Health Sciences	1,197	754	63.0
19	Home Economics	11	5	45.5
20	Vocational Home Economics	401	206	51.4
22	Law	78	59	75.6
23	Letters	14	6	42.9

TABLE 0.3 (Continued)

	MAJOR DISCIPLINE	ASSOCIATE DEGREES	NUMBER OF RETURNS	PERCENT RETURNS
24	Liberal/General Studies	1,321	727	55.0
25	Library and Archival Sciences	3	2	66.7
26	Life Sciences	47	34	72.3
27	Mathematics	16	10	62.5
30	Multi/Interdisciplinary Studies	39	15	38.5
31	Parks and Recreation	14	13	92.9
39	Theology	2	2	100.0
40	Physical Sciences	16	11	68.8
41	Science Technologies	92	55	59.8
42	Psychology	18	14	77.8
43	Protective Services	372	221	59.4
44	Public Affairs	41	23	56.1
45	Social Sciences	76	49	64.5
46	Construction Trades	573	320	55.8
47	Mechanics and Repairers	681	478	70.2
48	Precision Production	837	652	77.9
49	Transportation and Material Moving	48	33	68.8
50	Visual and Performing Arts	195	109	55.9
	TOTAL	17,550	11,946	68.1

TABLE 0.4

NUMBER OF RETURNS RECEIVED FROM GRADUATES AT FOUR-DEGREE LEVELS
AS COMPARED WITH THE NUMBER OF GRADUATES FOR ALL PENNSYLVANIA INSTITUTIONS
WITHIN THAT INSTITUTIONAL CATEGORY 1984

INSTITUTIONAL CATEGORY		ALL GRAD	ALL RETRN	BACL GRAD	BACL RETRN	MSTR GRAD	MSTR RETRN	DCTR GRAD	DCTR RETRN	1ST PRF GRAD	1ST PRF RETRN
Private Colleges and Universities	#	20,379	15,917	18,272	14,404	1,595	1,055	138	111	374	347
	%		78.1		78.8		66.1		80.4		92.8
State System of Higher Education	#	15,171	10,217	13,469	9,125	1,685	1,087	17	5	0	0
	%		67.3		67.7		64.5		29.4		.0
State-Aided	#	2,542	2,330	1,071	942	21	20	17	14	1,433	1,354
	%		91.7		88.0		95.2		82.4		94.5
State-Related	#	14,192	6,645	10,727	5,030	2,339	869	710	338	416	408
	%		46.8		46.9		37.2		47.6		98.1
TOTAL		52,284	35,109	43,539	29,501	5,640	3,031	882	468	2,223	2,109
			67.2		67.8		53.7		53.1		94.9

TABLE 0.5

NUMBER OF RETURNS BY MAJOR DISCIPLINE FROM GRADUATES AT FOUR-DEGREE LEVELS
COMPARED WITH THE NUMBER GRADUATED FROM ALL RESPONDING INSTITUTIONS
IN PENNSYLVANIA, 1984

MAJOR DISCIPLINE		ALL GRAD	ALL RETRN	BACL GRAD	BACL RETRN	MSTR GRAD	MSTR RETRN	DCTR GRAD	DCTR RETRN	1ST PRF GRAD	1ST PRF RETRN
01 AGRIBUSINESS AND AGRICULTURAL PRODUCTION	#	95	47	86	45	6	1	3	1	0	0
	%		49.5		52.3		16.7		33.3		.0
02 AGRICULTURAL SCIENCES	#	525	367	477	345	37	18	11	4	0	0
	%		69.9		72.3		48.6		36.4		.0
03 RENEWABLE NATURAL RESOURCES	#	202	114	177	103	20	10	5	1	0	0
	%		56.4		58.2		50.0		20.0		.0
04 ARCHITECTURE AND ENVIRONMENTAL DESIGN	#	263	189	241	172	20	15	2	2	0	0
	%		71.9		71.4		75.0		100.0		.0
05 AREA AND ETHNIC STUDIES	#	68	45	44	35	21	7	3	3	0	0
	%		66.2		79.5		33.3		100.0		.0
06 BUSINESS AND MANAGEMENT	#	11192	7201	10096	6635	1065	550	31	16	0	0
	%		64.3		65.7		51.6		51.6		.0
07 BUSINESS AND OFFICE	#	229	149	229	149	0	0	0	0	0	0
	%		65.1		65.1		.0		.0		.0
08 MARKETING AND DISTRIBUTION	#	570	394	531	386	39	8	0	0	0	0
	%		69.1		72.7		20.5		.0		.0
09 COMMUNICATIONS	#	1846	1142	1744	1098	101	43	1	1	0	0
	%		61.9		63.0		42.6		100.0		.0

TABLE 0.5

NUMBER OF RETURNS BY MAJOR DISCIPLINE FROM GRADUATES AT FOUR-DEGREE LEVELS
COMPARED WITH THE NUMBER GRADUATED FROM ALL RESPONDING INSTITUTIONS
IN PENNSYLVANIA, 1984

MAJOR DISCIPLINE		ALL GRAD	ALL RETRN	BACL GRAD	BACL RETRN	MSTR GRAD	MSTR RETRN	DCTR GRAD	DCTR RETRN	1ST PRF GRAD	1ST PRF RETRN
10 COMMUNICATIONS TECHNOLOGIES	#	83	68	83	68	0	0	0	0	0	0
	%		81.9		81.9		.0		.0		.0
11 COMPUTER AND INFORMATION SCIENCES	#	1799	1224	1663	1165	123	52	13	7	0	0
	%		68.0		70.1		42.3		53.8		.0
13 EDUCATION	#	6517	4288	4567	3207	1700	977	250	104	0	0
	%		65.8		70.2		57.5		41.6		.0
14 ENGINEERING	#	3873	2593	3383	2309	392	230	98	54	0	0
	%		67.0		68.3		58.7		55.1		.0
15 ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES	#	459	258	436	246	21	12	2	0	0	0
	%		56.2		56.4		57.1		.0		.0
16 FOREIGN LANGUAGES	#	387	254	359	242	26	11	2	1	0	0
	%		65.6		67.4		42.3		50.0		.0
17 ALLIED HEALTH	#	935	720	883	690	52	30	0	0	0	0
	%		77.0		78.1		57.7		.0		.0
18 HEALTH SCIENCES	#	4290	3395	2301	1628	234	109	111	98	1644	1560
	%		79.1		70.8		46.6		88.3		94.9
19 HOME ECONOMICS	#	478	307	444	290	24	11	10	6	0	0
	%		64.2		65.3		45.8		60.0		.0

TABLE 0.5

NUMBER OF RETURNS BY MAJOR DISCIPLINE FROM GRADUATES AT FOUR-DEGREE LEVELS COMPARED WITH THE NUMBER GRADUATED FROM ALL RESPONDING INSTITUTIONS IN PENNSYLVANIA, 1984

MAJOR DISCIPLINE		ALL GRAD	ALL RETRN	BACL GRAD	BACL RETRN	MSTR GRAD	MSTR RETRN	DCTR GRAD	DCTR RETRN	1ST PRF GRAD	1ST PRF RETRN
20 VOCATIONAL HOME ECONOMICS	#	115	50	115	50	0	0	0	0	0	0
	%		43.5		43.5		.0		.0		.0
22 LAW	#	886	718	117	59	190	110	0	0	579	549
	%		81.0		50.4		57.9		.0		94.8
23 LETTERS	#	1509	911	1351	830	109	58	49	23	0	0
	%		60.4		61.4		53.2		46.9		.0
24 LIBERAL/GENERAL STUDIES	#	291	169	282	166	9	3	0	0	0	0
	%		58.1		58.9		33.3		.0		.0
25 LIBRARY AND ARCHIVAL SCIENCES	#	94	60	46	30	48	30	0	0	0	0
	%		63.8		65.2		62.5		.0		.0
26 LIFE SCIENCES	#	2022	1390	1851	1294	115	63	56	33	0	0
	%		68.7		69.9		54.8		58.9		.0
27 MATHEMATICS	#	655	481	582	432	54	33	19	16	0	0
	%		73.4		74.2		61.1		84.2		.0
30 MULTI/INTERDISCIPLINARY STUDIES	#	515	334	471	305	41	29	3	0	0	0
	%		64.9		64.8		70.7		.0		.0
31 PARKS AND RECREATION	#	111	53	88	47	18	3	5	3	0	0
	%		47.7		53.4		16.7		60.0		.0

TABLE 0.5

NUMBER OF RETURNS BY MAJOR DISCIPLINE FROM GRADUATES AT FOUR-DEGREE LEVELS COMPARED WITH THE NUMBER GRADUATED FROM ALL RESPONDING INSTITUTIONS IN PENNSYLVANIA, 1984

MAJOR DISCIPLINE		ALL GRAD	ALL RETRN	BACL GRAD	BACL RETRN	MSTR GRAD	MSTR RETRN	DCTR GRAD	DCTR RETRN	1ST PRF GRAD	1ST PRF RETRN
38 PHILOSOPHY AND RELIGION	#	370	242	297	204	55	29	18	9	0	0
	%		65.4		68.7		52.7		50.0		.0
39 THEOLOGY	#	184	148	169	139	15	9	0	0	0	0
	%		80.4		82.2		60.0		.0		.0
40 PHYSICAL SCIENCES	#	1439	958	1154	820	180	94	105	44	0	0
	%		66.6		71.1		52.2		41.9		.0
42 PSYCHOLOGY	#	2989	2372	2751	2231	198	124	40	17	0	0
	%		79.4		81.1		62.6		42.5		.0
43 PROTECTIVE SERVICES	#	854	425	812	398	42	27	0	0	0	0
	%		49.8		49.0		64.3		.0		.0
44 PUBLIC AFFAIRS	#	991	614	653	434	334	178	4	2	0	0
	%		62.0		66.5		53.3		50.0		.0
45 SOCIAL SCIENCES	#	3719	2384	3520	2280	162	82	37	22	0	0
	%		64.1		64.8		50.6		59.5		.0
48 PRECISION PRODUCTION	#	35	21	35	21	0	0	0	0	0	0
	%		60.0		60.0		.0		.0		.0
50 VISUAL AND PERFORMING ARTS	#	1694	1024	1501	948	189	75	4	1	0	0
	%		60.4		63.2		39.7		25.0		.0

TABLE 0.5

NUMBER OF RETURNS BY MAJOR DISCIPLINE FROM GRADUATES AT FOUR-DEGREE LEVELS COMPARED WITH THE NUMBER GRADUATED FROM ALL RESPONDING INSTITUTIONS IN PENNSYLVANIA, 1984

MAJOR DISCIPLINE	ALL GRAD	ALL RETRN	BACL GRAD	BACL RETRN	MSTR GRAD	MSTR RETRN	DCTR GRAD	DCTR RETRN	1ST PRF GRAD	1ST PRF RETRN
TOTAL	52284	35109 67.2	43539	29501 67.8	5640	3031 53.7	882	468 53.1	2223	2109 94.9

VII. RESULTS FOR ASSOCIATE DEGREE GRADUATES

Table 1.0, on the pages that follow, summarizes the postgraduate activity of the associate degree graduates of 1983-84 in terms of the broadest (two-digit level) Classification of Instructional Programs (CIP) categories available. A more detailed analysis of selected major disciplines from Table 1.0 is then made using a combination of the four-digit and six-digit levels of the CIP classification system.

The findings of Table 1.0 are given in terms of two separate percentage distributions that accompany the numerical counts for a given major discipline area. Numerical counts are shown for each of the postgraduate activitiy categories used in this study. The first of the two percentage distributions is simply the percentage of reported graduates in each type of activity. The second percentage distribution indicates the percentage of graduates in the Civilian Labor Market engaged in employment-related activity, i.e., those in military service, those pursuing an advanced degree, and those engaged in activity unrelated to employment were excluded.

For each of the major disciplines, the findings are given in terms of: (1) the number of graduates who found degree-related employment in Pennsylvania; (2) the number of graduates who found degree-related employment outside of Pennsylvania; (3) the number of graduates who found employment in Pennsylvania that was unrelated to their degree field; (4) the number of graduates who found employment outside of Pennsylvania that was unrelated to their degree field; (5) the number of graduates who found part-time employment; (6) the number of graduates who were unemployed and still seeking employment; (7) the number of graduates who had entered military service; (8) the number of graduates who were pursuing an advanced degree and, finally; (9) the number of graduates who were engaged in other activities, i.e., those not employed and not in graduate school but who were also not seeking employment.

When a comparison, over time, of selected measures derived from this and previous reports on the associate degree graduates of 1976-77 through 1982-84 is made, the following results are obtained:

Year	Reported Graduates	Full-Time Employed	Part-Time Employed	Un-employed	Seeking Advanced Degree	Full-Time Employed In Field Prepared	Full-Time Employed In Pa.
1977	8,589	63.0	4.5	4.5	27.6	87.2	84.2
1978	9,128	68.5	3.5	6.1	21.9	85.7	86.9
1979	8,860	71.5	2.2	4.2	21.9	87.0	84.6
1980	8,853	68.5	3.8	5.9	22.1	87.9	87.4
1981	9,993	70.2	3.5	6.6	19.7	88.2	84.5
1982	8,938	61.3	5.7	12.1	17.2	84.9	84.2
1983	11,958	65.3	4.7	10.8	16.1	86.2	88.7
1984	11,946	65.9	6.6	8.3	15.9	86.1	84.5

TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
01 AGRIBUSINESS AND AGRICULTURAL PRODUCTION	#	61	32	3	4	0	9	5	7	0	1
	%		52.5	4.9	6.6	.0	14.8	8.2	11.5	.0	1.6
	%	53	60.4	5.7	7.5	.0	17.0	9.4			
03 RENEWABLE NATURAL RESOURCES	#	54	15	7	8	0	6	6	10	2	0
	%		27.8	13.0	14.8	.0	11.1	11.1	18.5	3.7	.0
	%	42	35.7	16.7	19.0	.0	14.3	14.3			
04 ARCHITECTURE AND ENVIRONMENTAL DESIGN	#	57	27	10	6	2	1	3	3	2	3
	%		47.4	17.5	10.5	3.5	1.8	5.3	5.3	3.5	5.3
	%	49	55.1	20.4	12.2	4.1	2.0	6.1			
06 BUSINESS AND MANAGEMENT	#	1,287	560	28	141	5	103	92	319	4	35
	%		43.5	2.2	11.0	.4	8.0	7.1	24.8	.3	2.7
	%	929	60.3	3.0	15.2	.5	11.1	9.9			
07 BUSINESS AND OFFICE	#	2,186	1,287	96	204	13	142	167	219	5	53
	%		58.9	4.4	9.3	.6	6.5	7.6	10.0	.2	2.4
	%	1,909	67.4	5.0	10.7	.7	7.4	8.7			
08 MARKETING AND DISTRIBUTION	#	263	160	13	21	4	16	14	24	0	11
	%		60.8	4.9	8.0	1.5	6.1	5.3	9.1	.0	4.2
	%	228	70.2	5.7	9.2	1.8	7.0	6.1			
09 COMMUNICATIONS	#	68	12	1	6	1	15	15	14	0	4
	%		17.6	1.5	8.8	1.5	22.1	22.1	20.6	.0	5.9
	%	50	24.0	2.0	12.0	2.0	30.0	30.0			

TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
10 COMMUNICATIONS TECHNOLOGIES	#	144	60	16	21	7	9	7	23	1	0
	%		41.7	11.1	14.6	4.9	6.3	4.9	16.0	.7	.0
	%	120	50.0	13.3	17.5	5.8	7.5	5.8			
11 COMPUTER AND INFORMATION SCIENCES	#	515	230	43	39	4	24	103	59	2	11
	%		44.7	8.3	7.6	.8	4.7	20.0	11.5	.4	2.1
	%	443	51.9	9.7	8.8	.9	5.4	23.3			
12 CONSUMER, PERSONAL, AND MISCELLANEOUS SERVICES	#	28	27	0	0	0	0	0	0	0	1
	%		96.4	.0	.0	.0	.0	.0	.0	.0	3.6
	%	27	100.0	.0	.0	.0	.0	.0			
13 EDUCATION	#	165	16	0	37	0	12	6	88	1	5
	%		9.7	.0	22.4	.0	7.3	3.6	53.3	.6	3.0
	%	71	22.5	.0	52.1	.0	16.9	8.5			
14 ENGINEERING	#	81	14	2	13	0	3	1	47	0	1
	%		17.3	2.5	16.0	.0	3.7	1.2	58.0	.0	1.2
	%	33	42.4	6.1	39.4	.0	9.1	3.0			
15 ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES	#	2,239	931	549	153	15	54	228	233	22	54
	%		41.6	24.5	6.8	.7	2.4	10.2	10.4	1.0	2.4
	%	1,930	48.2	28.4	7.9	.8	2.8	11.8			
16 FOREIGN LANGUAGES	#	2	0	0	1	0	0	0	0	0	1
	%		.0	.0	50.0	.0	.0	.0	.0	.0	50.0
	%	1	.0	.0	100.0	.0	.0	.0			

TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED OTHER IN PA	EMPLOYED IN FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
17 ALLIED HEALTH	#	998	609	50	49	0	104	92	64	1	29
	%		61.0	5.0	4.9	.0	10.4	9.2	6.4	.1	2.9
	%	904	67.4	5.5	5.4	.0	11.5	10.2			
18 HEALTH SCIENCES	#	754	438	34	12	0	112	32	108	1	17
	%		58.1	4.5	1.6	.0	14.9	4.2	14.3	.1	2.3
	%	628	69.7	5.4	1.9	.0	17.8	5.1			
19 HOME ECONOMICS	#	5	1	0	0	0	1	1	1	0	1
	%		20.0	.0	.0	.0	20.0	20.0	20.0	.0	20.0
	%	3	33.3	.0	.0	.0	33.3	33.3			
20 VOCATIONAL HOME ECONOMICS	#	206	106	6	17	0	14	13	45	0	5
	%		51.5	2.9	8.3	.0	6.8	6.3	21.8	.0	2.4
	%	156	67.9	3.8	10.9	.0	9.0	8.3			
22 LAW	#	59	20	4	13	0	3	7	8	0	4
	%		33.9	6.8	22.0	.0	5.1	11.9	13.6	.0	6.8
	%	47	42.6	8.5	27.7	.0	6.4	14.9			
23 LETTERS	#	6	1	0	1	0	0	0	4	0	0
	%		16.7	.0	16.7	.0	.0	.0	66.7	.0	.0
	%	2	50.0	.0	50.0	.0	.0	.0			
24 LIBERAL/GENERAL STUDIES	#	727	115	7	92	6	72	39	342	2	52
	%		15.8	1.0	12.7	.8	9.9	5.4	47.0	.3	7.2
	%	331	34.7	2.1	27.8	1.8	21.8	11.8			

TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
25 LIBRARY AND ARCHIVAL SCIENCES	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
26 LIFE SCIENCES	#	34	2	1	1	0	0	1	28	0	1
	%		5.9	2.9	2.9	.0	.0	2.9	82.4	.0	2.9
	%	5	40.0	20.0	20.0	.0	.0	20.0			
27 MATHEMATICS	#	10	1	0	2	0	0	0	7	0	0
	%		10.0	.0	20.0	.0	.0	.0	70.0	.0	.0
	%	3	33.3	.0	66.7	.0	.0	.0			
30 MULTI/INTERDISCIPLINARY STUDIES	#	15	3	0	1	0	4	1	6	0	0
	%		20.0	.0	6.7	.0	26.7	6.7	40.0	.0	.0
	%	9	33.3	.0	11.1	.0	44.4	11.1			
31 PARKS AND RECREATION	#	13	3	3	0	0	0	1	6	0	0
	%		23.1	23.1	.0	.0	.0	7.7	46.2	.0	.0
	%	7	42.9	42.9	.0	.0	.0	14.3			
39 THEOLOGY	#	2	1	0	0	1	0	0	0	0	0
	%		50.0	.0	.0	50.0	.0	.0	.0	.0	.0
	%	2	50.0	.0	.0	50.0	.0	.0			
40 PHYSICAL SCIENCES	#	11	2	0	0	0	0	0	9	0	0
	%		18.2	.0	.0	.0	.0	.0	81.8	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			

TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
41 SCIENCE TECHNOLOGIES	#	55	36	9	2	0	0	3	2	1	2
	%		65.5	16.4	3.6	.0	.0	5.5	3.6	1.8	3.6
	%	50	72.0	18.0	4.0	.0	.0	6.0			
42 PSYCHOLOGY	#	14	2	0	1	0	2	0	9	0	0
	%		14.3	.0	7.1	.0	14.3	.0	64.3	.0	.0
	%	5	40.0	.0	20.0	.0	40.0	.0			
43 PROTECTIVE SERVICES	#	221	81	4	40	2	21	10	58	0	5
	%		36.7	1.8	18.1	.9	9.5	4.5	26.2	.0	2.3
	%	158	51.3	2.5	25.3	1.3	13.3	6.3			
44 PUBLIC AFFAIRS	#	23	9	0	1	0	4	4	4	0	1
	%		39.1	.0	4.3	.0	17.4	17.4	17.4	.0	4.3
	%	18	50.0	.0	5.6	.0	22.2	22.2			
45 SOCIAL SCIENCES	#	49	7	0	5	0	9	3	24	0	1
	%		14.3	.0	10.2	.0	18.4	6.1	49.0	.0	2.0
	%	24	29.2	.0	20.8	.0	37.5	12.5			
46 CONSTRUCTION TRADES	#	320	197	29	29	1	10	28	18	1	7
	%		61.6	9.1	9.1	.3	3.1	8.7	5.6	.3	2.2
	%	294	67.0	9.9	9.9	.3	3.4	9.5			
47 MECHANICS AND REPAIRERS	#	478	253	83	34	7	14	55	14	11	7
	%		52.9	17.4	7.1	1.5	2.9	11.5	2.9	2.3	1.5
	%	446	56.7	18.6	7.6	1.6	3.1	12.3			

TABLE 1.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR ASSOCIATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
48 PRECISION PRODUCTION	#	652	340	139	43	7	13	44	39	6	21
	%		52.1	21.3	6.6	1.1	2.0	6.7	6.0	.9	3.2
	%	586	58.0	23.7	7.3	1.2	2.2	7.5			
49 TRANSPORTATION AND MATERIAL MOVING	#	33	11	1	5	1	0	0	15	0	0
	%		33.3	3.0	15.2	3.0	.0	.0	45.5	.0	.0
	%	18	61.1	5.6	27.8	5.6	.0	.0			
50 VISUAL AND PERFORMING ARTS	#	109	28	2	15	1	10	6	39	2	6
	%		25.7	1.8	13.8	.9	9.2	5.5	35.8	1.8	5.5
	%	62	45.2	3.2	24.2	1.6	16.1	9.7			
TOTAL		11,946	5,638	1,141	1,017	77	787	987	1,896	64	339
			47.2	9.6	8.5	.6	6.6	8.3	15.9	.5	2.8
		9,647	58.4	11.8	10.5	.8	8.2	10.2			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

These findings indicate that the associate degree graduates of 1984, like those of 1983, were still being impacted by the economic changes that have occurred during this period. The findings also suggest that the 1984 graduates had been affected to about the same degree as the 1983 graduates by these changes with full-time employment rising from 65.3 percent to 65.9 percent, part-time employment rising from 4.7 percent to 6.6 percent, unemployment dropping from 10.8 percent to 8.3 and full-time employment in the field of preparation dropping from 86.2 percent to 86.1 percent. Another interesting finding is the drop in full-time employment in Pennsylvania from 88.7 percent to 84.5 percent. Finally, it should be noted that there has been a recent pattern of decline in the proportion going on for an advanced degree.

Since the detailed data on the major disciplines found in Table 1.0 are difficult to assimilate easily, the Tables which follow are an attempt to rank the major disciplines of Table 1.0 using selected activity measures (Tables 1.01 through 1.05) and then to examine, in greater detail, major disciplines that have been selected from Table 1.0.

Associate Degree Graduates Employed Full-Time in Their Field of Preparation

Table 1.01 ranks the major disciplines of Table 1.0 according to the proportion of 1983-84 graduates finding employment related to their degree field. The top ten degree fields in Table 1.01 are: Library and Archival Sciences, 100.0 percent; Consumer, Personal, and Miscellaneous Services, 96.4 percent; Science Technologies, 81.8 percent; Precision Production,- 73.5 percent; Construction Trades, 70.6 percent; Engineering and Engineering-Related Technologies, 66.1 percent; Allied Health, 66.0 percent; Marketing and Distribution, 65.8 percent; and Architecture and Environmental Design, 64.9 percent while the ten bottom ranking degree fields were: Foreign Languages, 0.0 percent; Life Sciences, 8.8 percent; Education, 9.7 percent; Mathematics, 10.0 percent; Social Sciences and Psychology, 14.3 percent each; Letters, 16.7 percent; Liberal/General Studies, 16.8 percent; Physical Sciences, 18.2 percent; and Communications, 19.1 percent.

Table 1.01 must, however, be scrutinized carefully since the findings presented here can be misleading. The major disciplines that appear at the bottom of the table tend to be in areas that are typically characterized by their graduates going on for an advanced degree, or they are disciplines where an associate degree is relatively meaningless in terms of employment opportunities. Those major disciplines appearing at the top of Table 1.01 are major disciplines in which the associate degree is regarded as the terminal degree for degree-related employment in a specific occupation. Also, some areas, such as Theology, Philosophy and Religion may be high or low simply because they have a very small number of graduates. Findings for such major disciplines could be very different from year to year. Reference to Table 0.3, in Section I, concerning sample size, and sampling adequacy, of a degree field should always be made if the data for a given degree field are to be used in making career decisions or in carrying out educational planning.

TABLE 1.01

A RANK ORDERING OF ASSOCIATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES FINDING FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Library and Archival Sciences	100.0*	77.9*
2	Consumer, Personal, and Miscellaneous Services	96.4	86.5
3	Science Technologies	81.8	64.4
4	Precision Production	73.5	66.4
5	Construction Trades	70.6	64.9
6	Mechanics and Repairers	70.3	71.1
7	Engineering and Engineering-Related Technologies	66.1	53.1
8	Allied Health	66.0	71.1
9	Marketing and Distribution	65.8	73.3
10	Architecture and Environmental Design	64.9	31.4
11	Business and Office	63.3	63.4
12	Health Sciences	62.6	79.6
13	Agribusiness and Agricultural Production	57.4	50.0
-	All Graduates	56.8	55.6
14	Vocational Home Economics	54.4	53.6
15	Computer and Information Sciences	53.0	47.9
16	Communications Technologies	52.8	43.1
17	Theology	50.0*	100.0*
18	Parks and Recreation	46.2	7.7
19	Business and Management	45.7	41.5
20.5	Renewable Natural Resources	40.7	22.1
20.5	Law	40.7	61.6
22	Public Affairs	39.1	25.9
23	Protective Services	38.5	43.0
24	Transportation and Material Moving	36.4	53.2
25	Visual and Performing Arts	27.5	10.7
26.5	Home Economics	20.0*	NA
26.5	Multi/Interdisciplinary Studies	20.0	8.3
28	Engineering	19.8	14.6
29	Communications	19.1	44.8
30	Physical Sciences	18.2	11.1*
31	Liberal/General Studies	16.8	17.7
32	Letters	16.7*	0.0*
33.5	Psychology	14.3	0.0*
33.5	Social Studies	14.3	20.0
35	Mathematics	10.0*	0.0*
36	Education	9.7	8.0
37	Life Sciences	8.8	9.1
38	Foreign Languages	0.0*	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED STUDENTS.

Full-Time Degree-Related Employment of Associate Degree Graduates in the Civilian Labor Market

Table 1.01 is primarily of value only when the purpose is one of determining the relative position of a degree field in terms of the proportion of associate degree graduates obtaining employment in the field for which they were prepared. A more meaningful comparison between the degree fields is obtained when only those graduates who remained in the Civilian Labor Market are considered. This has been done in Table 1.02 where we now find disciplines such as: Consumer, Personal, and Miscellaneous Services, 100.0 percent; Library and Archival Sciences, 100.0 percent; Physical Sciences, 100.0 percent; Science Technologies, 90.0 percent; Parks and Recreation, 85.7 percent; Precision Production, 81.7 percent; Construction Trades, 76.9 percent; Engineering and Engineering-Related Technologies, 76.7 percent; Marketing and Distribution, 75.9 percent; and Architecture and Environmental Design, 75.5 percent, ranking among the top ten degree fields.

We also now find: Foreign Languages, 0.0 percent; Education, 22.5 percent; Communication, 26.0 percent; Social Sciences, 29.2 percent; Multi/Interdisciplinary Studies, Mathematics, and Home Economics, 33.3 percent, respectively; Liberal/General Studies, 36.9 percent; Psychology, 40.0 percent; and Visual and Performing Arts, 48.4 percent falling in the bottom ten rankings.

The observed differences between Tables 1.01 and 1.02 are, however, not as great as those that will characterize the higher level degrees, where the pursuit of an advanced degree is much more typical.

Associate Degree Graduates Employed Full-Time in Pennsylvania

Table 1.03 ranks the degree program areas of Table 1.0 according to the percentage of 1983-84 associate degree graduates who found full-time employment in Pennsylvania. This is, in part, a measure of Pennsylvania's holding power but it must also be remembered that some degree fields are characterized by a national rather than a local employment market, e.g., Engineering and Engineering-Related Technologies, while others tend to be primarily characterized by local employment, e.g., Parks and Recreation, Protective Services.

Unemployed Associate Degree Graduates in the Civilian Labor Market

Table 1.04 ranks the various degree program areas of Table 1.0 by the degree of reported unemployment for those 1983-84 graduates who were in the Civilian Labor Market. The lessening impact of the economic recession can be seen in this table where the percentage of unemployment is substantially reduced over that for the 1983 graduates in the field of Agribusiness and Agricultural Production, 29.4 to 9.4 percent; Computer and Information Sciences, 26.1 to 23.3 percent; Engineering and Engineering-Related Technologies, 20.7 to 11.8 percent and Construction Trades, 25.8 to 9.5 percent. In addition, graduates in Parks and Recreation, 14.3 percent; Renewable Natural Resources, 14.3 percent; Social Sciences, 12.5 percent; Home Economics, 33.3 percent; Communications, 30.0 percent; Public Affairs, 22.2 percent; Life Science, 20.0 percent; and Mechanics and Repairers, 12.3 percent continued to experience high unemployment.

TABLE 1.02

A RANK ORDERING OF ASSOCIATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES IN THE CIVILIAN LABOR MARKET WHO FOUND FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
2	Consumer, Personal, and Miscellaneous Services	100.0	97.8
2	Library and Archival Sciences	100.0*	77.8*
2	Physical Sciences	100.0	50.0*
4	Science Technologies	90.0	74.5
5	Parks and Recreation	85.7	11.1*
6	Precision Production	81.7	72.5
7	Construction Trades	76.9	69.4
8	Engineering and Engineering-Related Technologies	76.7	62.8
9	Marketing and Distribution	75.9	84.4
10	Architecture and Environmental Design	75.5	36.6
11	Mechanics and Repairers	75.3	80.5
12	Health Sciences	75.2	90.2
13	Allied Health	72.9	80.1
14	Business Office	72.4	72.5
15	Vocational Home Economics	71.8	69.7
-	All Graduates	70.2	68.8
16	Transportation and Materials Moving	66.7	83.3
17	Agribusiness and Agricultural Production	66.0	58.8
18.5	Communications Technologies	63.3	62.5
18.5	Business and Management	63.3	59.9
20	Computer and Information Sciences	61.6	56.7
21	Life Sciences	60.0	18.2
22	Protective Services	53.8	58.4
23	Renewable Natural Resources	52.4	34.9
24	Law	51.1	64.0
26	Letters	50.0*	0.0*
26	Theology	50.0*	100.0*
26	Public Affairs	50.0	50.0
28	Engineering	48.5	46.2
29	Visual and Performing Arts	48.4	28.6
30	Psychology	40.0	NA
31	Liberal/General Studies	36.9	38.6
33	Home Economics	33.3*	NA
33	Mathematics	33.3*	0.0*
33	Multi/Interdisciplinary Studies	33.3	17.6
35	Social Sciences	29.2	53.8
36	Communications	26.0	52.7
37	Education	22.5	17.9
38	Foreign Languages	0.0*	NA

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET. PROGRAM AREAS WITH NO REPORTED CIVILIAN LABOR MARKET EMPLOYMENT ARE NOT SHOWN HERE.

TABLE 1.03

A RANK ORDERING OF ASSOCIATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF FULL-TIME EMPLOYED 1983-84 GRADUATES WHO FOUND EMPLOYMENT IN PENNSYLVANIA

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
6	Consumer, Personal, and Miscellaneous Services	100.0	NA
6	Education	100.0	98.1
6	Foreign Languages	100.0*	NA
6	Home Economics	100.0*	NA
6	Letters	100.0*	NA
6	Mathematics	100.0*	100.0*
6	Multi/Interdisciplinary Studies	100.0	100.0*
6	Physical Sciences	100.0	100.0*
6	Psychology	100.0	NA
6	Public Affairs	100.0	100.0*
6	Social Sciences	100.0	100.0*
12	Business and Management	95.5	96.1
13.5	Vocational Home Economics	95.3	95.8
13.5	Protective Services	95.3	96.3
15	Liberal/General Studies	94.1	95.5
16	Visual and Performing Arts	93.5	91.7
17	Business and Office	93.2	95.8
18	Engineering	93.1	90.9
19	Health Sciences	93.0	95.8
20	Allied Health	92.9	90.3
21	Agribusiness and Agricultural Production	92.3	100.0
22	Marketing and Distribution	91.4	76.5
23	Communications	90.0	93.2
24	Law	89.2	85.4
25	Transportation and Material Moving	88.9	71.6
26	Construction Trades	88.3	95.7
27	Computer and Information Sciences	85.1	92.1
-	All Graduates	84.5	87.6
28	Science Technologies	80.9	90.5
29	Communications Technologies	77.9	83.9
30	Renewable Natural Resources	76.7	56.0
31	Mechanics and Repairers	76.1	63.7
32	Life Sciences	75.0	75.0
33	Architecture and Environmental Design	73.3	69.6
34	Precision Production	72.4	73.6
35	Engineering and Engineering-Related Technologies	65.8	77.2
37	Library and Archival Sciences	50.0*	100.0*
37	Parks and Recreation	50.0	100.0*
37	Theology	50.0*	100.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED FULL-TIME EMPLOYED GRADUATES. PROGRAM AREAS WITH NO REPORTED FULL-TIME EMPLOYMENT ARE NOT SHOWN HERE.

TABLE 1.04

A RANK ORDERING OF ASSOCIATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1983-84 GRADUATES IN THE CIVILIAN MARKET

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Home Economics	33.3*	NA
2	Communications	30.0	12.3
3	Computer and Information Sciences	23.3	26.1
4	Public Affairs	22.2	14.3
5	Life Sciences	20.0	18.2
6	Law	14.9	12.0
7.5	Renewable Natural Resources	14.3	23.3
7.5	Parks and Recreation	14.3	33.3*
9	Social Sciences	12.5	7.7
10	Mechanics and Repairers	12.3	8.3
11.5	Engineering and Engineering-Related Technologies	11.8	20.7
11.5	Liberal/General Studies	11.8	16.4
13	Multi/Interdisciplinary Studies	11.1	17.6
-	All Graduates	10.2	13.3
14	Allied Health	10.2	8.1
15	Business and Management	9.9	13.3
16	Visual and Performing Arts	9.7	23.8
17	Construction Trades	9.5	25.8
18	Agribusiness and Agricultural Production	9.4	29.4
19	Business and Office	8.7	9.8
20	Education	8.5	10.4
21	Vocational Home Economics	8.3	10.6
22	Precision Production	7.5	12.0
23	Protective Services	6.3	7.8
24.5	Marketing and Distribution	6.1	5.0
24.5	Architecture and Environmental Design	6.1	20.0
26	Science Technologies	6.0	15.7
27	Communications Technologies	5.8	10.0
28	Health Sciences	5.1	2.3
29	Engineering	3.0	7.7
34	Consumer, Personal, and Miscellaneous Services	0.0	0.0
34	Foreign Languages	0.0*	NA
34	Letters	0.0*	0.0*
34	Library and Archival Sciences	0.0*	22.2*
34	Mathematics	0.0*	75.0*
34	Theology	0.0*	0.0*

34	Physical Sciences	0.0	0.0*
34	Psychology	0.0	NA
34	Transportation and Material Moving	0.0	6.7

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET. PROGRAM AREAS WITH NO REPORTED CIVILIAN LABOR MARKET EMPLOYMENT ARE NOT SHOWN HERE.

TABLE 1.05

A RANK ORDERING OF ASSOCIATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1983-84 GRADUATES IN THE CIVILIAN MARKET

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Life Sciences	82.4	45.5
2	Physical Sciences	81.8	66.7*
3	Mathematics	70.0*	28.6*
4	Letters	66.7*	83.3*
5	Psychology	64.3	100.0*
6	Engineering	58.0	68.3
7	Education	53.3	51.7
8	Social Sciences	49.0	60.0
9	Liberal/General Studies	47.0	44.0
10	Parks and Recreation	46.2	30.8
11	Transportation and Material Moving	45.5	31.9
12	Multi/Interdisciplinary Studies	40.0	44.4
13	Visual and Performing Arts	35.8	57.1
14	Protective Services	26.2	25.2
15	Business and Management	24.8	28.6
16	Vocational Home Economics	21.8	21.1
17	Communications	20.6	11.9
18	Home Economics	20.0*	NA
19	Renewable Natural Resources	18.5	36.8
20	Public Affairs	17.4	44.4
21	Communications Technologies	16.0	24.1
-	All Graduates	15.9	16.1
22	Health Sciences	14.3	10.4
23	Law	13.6	1.9
24.5	Agribusiness and Agricultural Production	11.5	15.0
24.5	Computer and Information Sciences	11.5	11.0
26	Engineering and Engineering-Related Technologies	10.4	14.3
27	Business and Office	10.0	9.6
28	Marketing and Distribution	9.1	9.6
29	Allied Health	6.4	7.9
30	Precision Production	6.0	5.6
31	Construction Trades	5.6	4.5
32	Architecture and Environmental Design	5.3	8.6
33	Science Technologies	3.6	13.6
34	Mechanics and Repairers	2.9	5.5
36.5	Consumer, Personal, and Miscellaneous Services	.0	1.9
36.5	Foreign Languages	.0*	100.0*
36.5	Library and Archival Sciences	.0*	0.0*
36.5	Theology	.0*	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES.

These findings suggest that, in periods of recession, associate degree graduates in fields where a higher level terminal degree exists are not the first choice of employers hiring graduates in that degree field, e.g., Computer and Information Sciences.

Associate Degree Graduates Pursuing an Advanced Degree

Table 1.05 ranks the degree program areas of Table 1.0 according to the percentage of the reported 1984 graduates in each degree program area who went on for an advanced degree.

As might be expected, graduates in the Life Sciences (82.4%), Physical Sciences (81.8%), Mathematics (70.0%), Letters (66.7%) and Psychological Sciences (64.3%), rank high in this regard along with graduates in Education (53.3%), Engineering (58.0%), and the Social Sciences (49.0%), while graduates in fields such as: Science Technologies (3.6%), Mechanics and Repair (2.9%), Construction Trades (5.6%), Precision Production (6.0%), Allied Health (6.4%), and Marketing and Distribution (9.1%) do not. Some degree fields, at this level, also had few or none going on to advanced degree work, e.g., Consumer, Personal and Miscellaneous Services (0.0%), Theology (0.0%) and Foreign Languages (0.0%), possibly because these programs at the associate degree level are no longer as attractive to students planning on higher degrees.

DETAILED ANALYSES OF SELECTED ASSOCIATE DEGREE DISCIPLINES

Many of the fifty major discipline categories specified by the Classification of Instructional Programs (CIP) Code, at the two-digit level, are not sufficiently detailed for the purposes of the users of this report. It was not practicable, however, to go to the four-digit or six-digit CIP code level in preparing Table 1.0 due to the sheer number of degree program categories that would be generated. As a consequence, this portion of the report will be used to focus upon selected degree program areas of Table 1.0.

Results for Associate Degree Graduates in Agriculture and Renewable Natural Resources

Table 1.06 summarizes postgraduate activity findings for specific degree fields of interest within the major disciplines of Agriculture and of Renewable Natural Resources. When analyzing this table, and others like it in this report, only two major analyses will be made, in contrast to the analyses made for Tables 1.0, 2.0, 3.0, 4.0, and 5.0 of this report.

The two variables that seemed most useful in looking at tables such as Table 1.06 were: (1) degree-related, full-time employment rates for graduates entering the Civilian Labor Market and (2) the proportion of full-time employed graduates who are employed in Pennsylvania.

When the degree fields of Table 1.06 are ranked according to rate of full-time, degree-related employment in the Civilian Labor Market the following listing is obtained:

TABLE 1.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN AGRICULTURE AND RENEWABLE NATURAL RESOURCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
AGRIBUSINESS AND AGRICULTURAL PRODUCTION											
AGRICULTURAL PRODUCTION											
	#	13	9	0	1	0	1	1	1	0	0
	%		69.2	.0	7.7	.0	7.7	7.7	7.7	.0	.0
	%	12	75.0	.0	8.3	.0	8.3	8.3			
HORTICULTURE											
	#	31	16	1	3	0	6	2	2	0	1
	%		51.6	3.2	9.7	.0	19.4	6.5	6.5	.0	3.2
	%	28	57.1	3.6	10.7	.0	21.4	7.1			
AGRIBUSINESS AND AGRICULTURAL PRODUCTION, OTHER											
	#	17	7	2	0	0	2	2	4	0	0
	%		41.2	11.8	.0	.0	11.8	11.8	23.5	.0	.0
	%	13	53.8	15.4	.0	.0	15.4	15.4			
*TOTAL AGRIBUSINESS AND AGRICULTURAL PRODUCTION											
		61	32	3	4	0	9	5	7	0	1
			52.5	4.9	6.6	.0	14.8	8.2	11.5	.0	1.6
		53	60.4	5.7	7.5	.0	17.0	9.4			
RENEWABLE NATURAL RESOURCES											
RENEWABLE NATURAL RESOURCES, GENERAL											
	#	2	1	0	0	0	0	0	1	0	0
	%		50.0	.0	.0	.0	.0	.0	50.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
FISHING AND FISHERIES											
	#	5	1	3	1	0	0	0	0	0	0
	%		20.0	60.0	20.0	.0	.0	.0	.0	.0	.0
	%	5	20.0	60.0	20.0	.0	.0	.0			
FORESTRY PRODUCTION AND PROCESSING											
	#	30	11	4	5	0	4	2	3	1	0
	%		36.7	13.3	16.7	.0	13.3	6.7	10.0	3.3	.0
	%	26	42.3	15.4	19.2	.0	15.4	7.7			

TABLE 1.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN AGRICULTURE AND RENEWABLE NATURAL RESOURCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
RENEWABLE NATURAL RESOURCES											
WILDLIFE MANAGEMENT	#	17	2	0	2	0	2	4	6	1	0
	%		11.8	.0	11.8	.0	11.8	23.5	35.3	5.9	.0
	%	10	20.0	.0	20.0	.0	20.0	40.0			
*TOTAL RENEWABLE NATURAL RESOURCES		54	15	7	8	0	6	6	10	2	0
			27.8	13.0	14.8	.0	11.1	11.1	18.5	3.7	.0
		42	35.7	16.7	19.0	.0	14.3	14.3			
TOTAL		115	47	10	12	0	15	11	17	2	1
			40.9	8.7	10.4	.0	13.0	9.6	14.8	1.7	.9
		95	49.5	10.5	12.6	.0	15.8	11.6			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	1	Renewable Natural Resources, General	100.0	0.0
2	5	Fishing and Fisheries	80.0	57.1
3	12	Agricultural Production	75.0	NA
4	13	Agribusiness and Agricultural Production, Other	69.2	NA
5	28	Horticulture	60.7	50.0
-	95	All Agriculture and Renewable Natural Resources Graduates	60.0	41.7
6	26	Forestry Products and Processing	57.7	47.4
7	10	Wildlife Management	20.0	13.3

It is apparent that Agriculture and Renewable Natural Resources graduates, at this degree level, had considerably less difficulty finding degree-related employment in 1984 than they did in 1983.

When ranked according to the rate of Pennsylvania employment of full-time employed graduates, the degree fields of Agriculture and Renewable Natural Resources, at the associate degree level, ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2	10	Agricultural Production	100.0	NA
2	4	Wildlife Management	100.0	87.5
2	1	Renewable Natural Resources, General	100.0	100.0
4	20	Horticulture	95.0	100.0
-	69	All Agriculture and Renewable Natural Resources Graduates	85.5	69.4
5	20	Forestry Products and Processing	80.0	45.5
6	9	Agribusiness and Agriculture Production, Other	77.8	100.0
7	5	Fishing and Fisheries	40.0	0.0

Results for Associate Degree Graduates in Business and in Marketing

Table 1.07 gives detailed data on the activities of the associate degree graduates of 1983-84 who received degrees in fields under the general rubric of Business and Marketing. When twenty-six degree fields from Table 1.07 are ranked according to the proportion of graduates in the Civilian Labor Market who found full-time, degree-related employment, they rank as follows:

TABLE 1.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BUSINESS AND MANAGEMENT											
BUSINESS AND MANAGEMENT, GENERAL											
	#	152	89	4	13	3	9	10	22	0	2
	%		58.6	2.6	8.6	2.0	5.9	6.6	14.5	.0	1.3
	%	128	69.5	3.1	10.2	2.3	7.0	7.8			
ACCOUNTING											
	#	132	86	1	8	0	10	8	16	1	2
	%		65.2	.8	6.1	.0	7.6	6.1	12.1	.8	1.5
	%	113	76.1	.9	7.1	.0	8.8	7.1			
BANKING AND FINANCE											
	#	2	1	0	1	0	0	0	0	0	0
	%		50.0	.0	50.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	.0	50.0	.0	.0	.0			
BUSINESS ADMINISTRATION AND MANAGEMENT											
	#	879	321	19	105	2	75	69	257	3	28
	%		36.5	2.2	11.9	.2	8.5	7.8	29.2	.3	3.2
	%	591	54.3	3.2	17.8	.3	12.7	11.7			
INSTITUTIONAL MANAGEMENT											
	#	61	32	4	6	0	5	4	8	0	2
	%		52.5	6.6	9.8	.0	8.2	6.6	13.1	.0	3.3
	%	51	62.7	7.8	11.8	.0	9.8	7.8			
LABOR/INDUSTRIAL RELATIONS											
	#	6	2	0	1	0	1	0	2	0	0
	%		33.3	.0	16.7	.0	16.7	.0	33.3	.0	.0
	%	4	50.0	.0	25.0	.0	25.0	.0			
MANAGEMENT INFORMATION SYSTEMS											
	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			

TABLE 1.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BUSINESS AND MANAGEMENT											
MARKETING MANAGEMENT AND RESEARCH	#	26	9	0	3	0	3	1	9	0	1
	%		34.6	.0	11.5	.0	11.5	3.8	34.6	.0	3.8
	%	16	56.3	.0	18.8	.0	18.8	6.3			
PERSONNEL MANAGEMENT	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
REAL ESTATE	#	7	4	0	3	0	0	0	0	0	0
	%		57.1	.0	42.9	.0	.0	.0	.0	.0	.0
	%	7	57.1	.0	42.9	.0	.0	.0			
SMALL BUSINESS MANAGEMENT AND OWNERSHIP	#	1	0	0	1	0	0	0	0	0	0
	%		.0	.0	100.0	.0	.0	.0	.0	.0	.0
	%	1	.0	.0	100.0	.0	.0	.0			
TRADE AND INDUSTRIAL SUPERVISION AND MANAGEMENT	#	7	5	0	0	0	0	0	2	0	0
	%		71.4	.0	.0	.0	.0	.0	28.6	.0	.0
	%	5	100.0	.0	.0	.0	.0	.0			
BUSINESS AND MANAGEMENT, OTHER	#	11	8	0	0	0	0	0	3	0	0
	%		72.7	.0	.0	.0	.0	.0	27.3	.0	.0
	%	8	100.0	.0	.0	.0	.0	.0			
*TOTAL BUSINESS AND MANAGEMENT		1,287	560	28	141	5	103	92	319	4	35
			43.5	2.2	11.0	.4	8.0	7.1	24.8	.3	2.7
		929	60.3	3.0	15.2	.5	11.1	9.9			

TABLE 1.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BUSINESS AND OFFICE											
ACCOUNTING, BOOKKEEPING, AND RELATED PROGRAMS	#	444	247	10	36	2	23	44	69	1	12
	%		55.6	2.3	8.1	.5	5.2	9.9	15.5	.2	2.7
	%	362	68.2	2.8	9.9	.6	6.4	12.2			
BANKING AND RELATED FINANCIAL PROGRAMS	#	17	12	1	2	0	0	0	1	1	0
	%		70.6	5.9	11.8	.0	.0	.0	5.9	5.9	.0
	%	15	80.0	6.7	13.3	.0	.0	.0			
BUSINESS DATA PROCESSING AND RELATED PROGRAMS	#	686	292	24	102	6	66	59	118	3	16
	%		42.6	3.5	14.9	.9	9.6	8.6	17.2	.4	2.3
	%	549	53.2	4.4	18.6	1.1	12.0	10.7			
OFFICE SUPERVISION AND MANAGEMENT	#	12	3	0	1	0	5	1	2	0	0
	%		25.0	.0	8.3	.0	41.7	8.3	16.7	.0	.0
	%	10	30.0	.0	10.0	.0	50.0	10.0			
PERSONNEL AND TRAINING PROGRAMS	#	6	3	3	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	6	50.0	50.0	.0	.0	.0	.0			
SECRETARIAL AND RELATED PROGRAMS	#	941	699	54	46	5	37	55	23	0	22
	%		74.3	5.7	4.9	.5	3.9	5.8	2.4	.0	2.3
	%	896	78.0	6.0	5.1	.6	4.1	6.1			
TYPING, GENERAL OFFICE, AND RELATED PROGRAMS	#	42	21	1	6	0	6	4	1	0	3
	%		50.0	2.4	14.3	.0	14.3	9.5	2.4	.0	7.1
	%	38	55.3	2.6	15.8	.0	15.8	10.5			

TABLE 1.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BUSINESS AND OFFICE											
BUSINESS AND OFFICE, OTHER	#	38	10	3	11	0	5	4	5	0	0
	%		26.3	7.9	28.9	.0	13.2	10.5	13.2	.0	.0
	%	33	30.3	9.1	33.3	.0	15.2	12.1			
*TOTAL BUSINESS AND OFFICE		2,186	1,287	96	204	13	142	167	219	5	53
			58.9	4.4	9.3	.6	6.5	7.6	10.0	.2	2.4
		1,909	67.4	5.0	10.7	.7	7.4	8.7			
MARKETING AND DISTRIBUTION											
APPAREL AND ACCESSORIES MARKETING	#	102	65	9	4	0	4	8	5	0	7
	%		63.7	8.8	3.9	.0	3.9	7.8	4.9	.0	6.9
	%	90	72.2	10.0	4.4	.0	4.4	8.9			
ENTREPRENEURSHIP	#	1	0	0	1	0	0	0	0	0	0
	%		.0	.0	100.0	.0	.0	.0	.0	.0	.0
	%	1	.0	.0	100.0	.0	.0	.0			
GENERAL MARKETING	#	95	51	2	8	0	11	5	17	0	1
	%		53.7	2.1	8.4	.0	11.6	5.3	17.9	.0	1.1
	%	77	66.2	2.6	10.4	.0	14.3	6.5			
HOSPITALITY AND RECREATION MARKETING	#	11	8	0	1	0	1	0	1	0	0
	%		72.7	.0	9.1	.0	9.1	.0	9.1	.0	.0
	%	10	80.0	.0	10.0	.0	10.0	.0			
TRANSPORTATION AND TRAVEL MARKETING	#	54	36	2	7	4	0	1	1	0	3
	%		66.7	3.7	13.0	7.4	.0	1.9	1.9	.0	5.6
	%	50	72.0	4.0	14.0	8.0	.0	2.0			

TABLE 1.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

	TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
*TOTAL MARKETING AND DISTRIBUTION	263	160	13	21	4	16	14	24	0	11
		60.8	4.9	8.0	1.5	6.1	5.3	9.1	.0	4.2
	228	70.2	5.7	9.2	1.8	7.0	6.1			
TOTAL	3,736	2,007	137	366	22	261	273	562	9	99
		53.7	3.7	9.8	.6	7.0	7.3	15.0	.2	2.6
	3,066	65.5	4.5	11.9	.7	8.5	8.9			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
3	8	Business and Management Other	100.0	33.3
3	2	Management Information Systems	100.0	NA
3	6	Personnel and Training Programs	100.0	NA
3	1	Personnel Management	100.0	NA
3	5	Trade and Industrial Supervision and Management	100.0	87.5
6	15	Banking and Related Financial Programs	86.7	61.5
7	896	Secretarial and Related Programs	84.0	NA
8	90	Apparel and Accessories Marketing	82.2	98.0
9	10	Hospitality and Recreation Marketing	80.0	NA
10	113	Accounting	77.0	65.4
11	50	Transportation and Travel Marketing	76.0	84.5
12	128	Business and Management, General	72.6	68.6
13	362	Accounting, Bookkeeping and Related Program	71.0	68.0
14	51	Institutional Management	70.5	70.7
-	3,066	All Business and Marketing Graduates	70.0	69.5
15	77	General Marketing	68.8	66.2
16	38	Typing, General Office, and Related Programs	57.9	60.0
17	549	Business Data Processing and Related Programs	57.6	51.5
18	591	Business Administration and Management	57.5	53.6
19	7	Real Estate	57.1	25.0
20	16	Marketing Management and Research	56.3	64.7
21.5	2	Banking and Finance	50.0	61.5
21.5	4	Labor/Industrial Relations	50.0	100.0
23	33	Business and Office, Other	39.4	33.3
24	10	Office Supervision and Management	30.0	41.6
25.5	1	Enterpreneurship	0.0	100.0
25.5	1	Small Business Management and Ownership	0.0	NA

Although the graduates of 1984 are still not experiencing the high level of degree-related employment that graduates prior to 1982 had enjoyed, fifteen of twenty-six degree fields of Table 1.07 had sixty percent or more of their job-seeking associate degree graduates finding degree-related employment, and eleven fields had seventy-five percent or more finding such employment.

When the twenty-six degree fields of Table 1.07 are ranked according to the rate of Pennsylvania based employment among those who had found full-time employment of some kind, the degree fields of Table 1.07 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
6.5	2	Banking Finance	100.0	100.0
6.5	8	Business and Management, Other	100.0	100.0
6.5	1	Entrepreneurship	100.0	14.0
6.5	9	Hospitality and Recreation Marketing	100.0	NA
6.5	3	Labor/Industrial Relations	100.0	100.0
6.5	2	Management and Information Systems	100.0	NA
6.5	12	Marketing Management and Research	100.0	100.0
6.5	4	Office Supervision and Management	100.0	85.7
6.5	1	Personnel Management	100.0	NA
6.5	7	Real Estate	100.0	96.1
6.5	1	Small Business Management and Ownership	100.0	NA
6.5	5	Trade and Industrial Supervision and Management	100.0	95.5
6.5	95	Accounting	98.9	97.3
14	61	General Marketing	96.7	94.5
15	28	Typing, General Office and Related Programs	96.4	100.0
16	295	Accounting, Bookkeeping and Related Programs	95.9	92.3
17	447	Business Administration and Management	95.3	95.3
-	2,532	All Business and Marketing Graduates	93.7	94.3
18	109	Business and Management, General	93.6	98.4
19	15	Banking and Related Financial Programs	93.3	100.0
20	424	Business Data Processing and Related Programs	92.9	95.0
21	804	Secretarial and Related	92.7	97.0
22	42	Institutional Management	90.5	90.6
23	78	Apparel and Accessories Marketing	88.5	94.0
24	49	Transportation and Travel Marketing	87.8	92.0
25	24	Business and Office, Other	87.5	100.0
26	6	Personnel and Training Programs	50.0	NA

The associate degree graduates of 1984 tended to find employment in the State of Pennsylvania. The only exception to this was the degree field of Personnel and Training Programs where 50 percent of the six full-time employed graduates found positions outside of Pennsylvania.

Results for Associate Degree Graduates in Education

It is clear in Table 1.08, that associate degree graduates in Education are relatively few in number and are likely to go on for an advanced degree. It is also clear that there are relatively few education-related degree fields at this level.

TABLE 1.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
EDUCATION, GENERAL											
EDUCATION, GENERAL	#	86	0	0	31	0	2	4	46	1	2
	%		.0	.0	36.0	.0	2.3	4.7	53.5	1.2	2.3
	%	37	.0		83.8	.0	5.4	10.8			
*TOTAL EDUCATION, GENERAL		86	0	0	31	0	2	4	46	1	2
			.0	.0	36.0	.0	2.3	4.7	53.5	1.2	2.3
		37	.0		83.8	.0	5.4	10.8			
TEACHER EDUCATION, GENERAL PROGRAMS											
ELEMENTARY EDUCATION	#	17	0	0	1	0	0	0	14	0	2
	%		.0	.0	5.9	.0	.0	.0	82.4	.0	11.8
	%	1	.0		100.0	.0	.0	.0			
PRE-ELEMENTARY EDUCATION	#	13	5	0	1	0	2	1	4	0	0
	%		38.5	.0	7.7	.0	15.4	7.7	30.8	.0	.0
	%	9	55.6		11.1	.0	22.2	11.1			
SECONDARY EDUCATION	#	14	0	0	1	0	1	0	12	0	0
	%		.0	.0	7.1	.0	7.1	.0	85.7	.0	.0
	%	2	.0		50.0	.0	50.0	.0			
EARLY CHILDHOOD EDUCATION	#	19	7	0	0	0	7	1	3	0	1
	%		36.8	.0	.0	.0	36.8	5.3	15.8	.0	5.3
	%	15	46.7		.0	.0	46.7	6.7			
TEACHER EDUCATION, GENERAL PROGRAMS, OTHER	#	8	2	0	1	0	0	0	5	0	0
	%		25.0	.0	12.5	.0	.0	.0	62.5	.0	.0
	%	3	66.7		33.3	.0	.0	.0			

TABLE 1.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
*TOTAL TEACHER EDUCATION, GENERAL PROGRAMS											
		71	14	0	4	0	10	2	38	0	3
			19.7	.0	5.6	.0	14.1	2.8	53.5	.0	4.2
		30	46.7		13.3	.0	33.3	6.7			
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
BUSINESS EDUCATION											
	#	3	1	0	1	0	0	0	1	0	0
	%		33.3	.0	33.3	.0	.0	.0	33.3	.0	.0
	%	2	50.0		50.0	.0	.0	.0			
MUSIC EDUCATION											
	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0		.0	.0	.0	.0			
PHYSICAL EDUCATION											
	#	4	1	0	1	0	0	0	2	0	0
	%		25.0	.0	25.0	.0	.0	.0	50.0	.0	.0
	%	2	50.0		50.0	.0	.0	.0			
*TOTAL TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
		8	2	0	2	0	0	0	4	0	0
			25.0	.0	25.0	.0	.0	.0	50.0	.0	.0
		4	50.0		50.0	.0	.0	.0			
TOTAL											
		165	16	0	37	0	12	6	88	1	5
			9.7	.0	22.4	.0	7.3	3.6	53.3	.6	3.0
		71	22.5		52.1	.0	16.9	8.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

When ranked according to the rate of degree-related, full-time Civilian Labor Market employment, the seven degree fields of Table 1.08 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	2	Business Education	50.0	NA
1.5	2	Physical Education	50.0	NA
3	15	Early Childhood Education	46.7	46.7
	71	All Education Graduates	22.5	17.9
4	1	Elementary Education	0.0	0.0
4	37	General Education	0.0	2.4
4	2	Secondary Education	0.0	0.0

These graduates, for the most part, simply do not qualify for, nor obtain, degree-relevant employment.

When ranked on the basis of full-time Pennsylvania based employment, the degree fields of Table 1.08 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
-	53	All Education Graduates	100.0	98.1
3.5	2	Business Education	100.0	NA
3.5	7	Early Childhood Education	100.0	90.0
3.5	1	Elementary Education	100.0	NA
3.5	31	General Education	100.0	100.0
3.5	2	Physical Education	100.0	NA
3.5	1	Secondary Education	100.0	0.0

Results for Associate Degree Graduates in General Engineering and in Engineering and Engineering-Related Technologies

Table 1.09 gives detailed degree field information on those graduates in Table 1.0 who were designated as being graduates in the major discipline area of Engineering and Engineering-Related Technologies.

When the degree fields of Table 1.09 are ranked according to degree of full-time, degree-related Civilian Labor Market employment, they rank as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	2	Engineering Physics	100.0	NA
2	53	Engineering and Engineering-Related Technologies, Other	83.0	73.9
3	139	Electromechanical Instrumentation and Maintenance Technology	82.0	87.3
4	1,001	Electrical and Electronic Technologies	78.6	64.7

TABLE 1.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD
FOR ASSOCIATE DEGREE GRADUATES IN ENGINEERING-RELATED TECHNOLOGIES AND IN ENGINNEERING, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
ENGINEERING, GENERAL											
	#	60	9	0	3	0	3	1	44	0	0
	%		15.0	.0	5.0	.0	5.0	1.7	73.3	.0	.0
	%	16	56.3	.0	18.8	.0	18.8	6.3			
ENGINEERING PHYSICS											
	#	3	2	0	0	0	0	0	1	0	0
	%		66.7	.0	.0	.0	.0	.0	33.3	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
INDUSTRIAL ENGINEERING											
	#	18	3	2	10	0	0	0	2	0	1
	%		16.7	11.1	55.6	.0	.0	.0	11.1	.0	5.6
	%	15	20.0	13.3	66.7	.0	.0	.0			
ARCHITECTURAL TECHNOLOGIES											
	#	125	41	30	10	0	8	11	20	2	3
	%		32.8	24.0	8.0	.0	6.4	8.8	16.0	1.6	2.4
	%	100	41.0	30.0	10.0	.0	8.0	11.0			
CIVIL TECHNOLOGIES											
	#	183	85	28	19	2	7	14	19	2	7
	%		46.4	15.3	10.4	1.1	3.8	7.7	10.4	1.1	3.8
	%	155	54.8	18.1	12.3	1.3	4.5	9.0			
ELECTRICAL AND ELECTRONIC TECHNOLOGIES											
	#	1,150	539	248	74	6	30	104	95	10	44
	%		46.9	21.6	6.4	.5	2.6	9.0	8.3	.9	3.8
	%	1,001	53.8	24.8	7.4	.6	3.0	10.4			
ELECTROMECHANICAL INSTRUMENTATION AND MAINTENANCE TECHNOLOGY											
	#	144	67	47	14	0	0	11	3	2	0
	%		46.5	32.6	9.7	.0	.0	7.6	2.1	1.4	.0
	%	139	48.2	33.8	10.1	.0	.0	7.9			
ENVIRONMENTAL CONTROL TECHNOLOGIES											
	#	13	2	2	2	0	3	0	4	0	0
	%		15.4	15.4	15.4	.0	23.1	.0	30.8	.0	.0
	%	9	22.2	22.2	22.2	.0	33.3	.0			

TABLE 1.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD
FOR ASSOCIATE DEGREE GRADUATES IN ENGINEERING-RELATED TECHNOLOGIES AND IN ENGINNEERING, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
INDUSTRIAL PRODUCTION TECHNOLOGIES											
	#	84	33	12	5	0	2	16	15	1	0
	%		39.3	14.3	6.0	.0	2.4	19.0	17.9	1.2	.0
	%	68	48.5	17.6	7.4	.0	2.9	23.5			
MECHANICAL AND RELATED TECHNOLOGIES											
	#	472	133	169	27	6	2	68	62	5	0
	%		28.2	35.8	5.7	1.3	.4	14.4	13.1	1.1	.0
	%	405	32.8	41.7	6.7	1.5	.5	16.8			
ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES, OTHER											
	#	68	31	13	2	1	2	4	15	0	0
	%		45.6	19.1	2.9	1.5	2.9	5.9	22.1	.0	.0
	%	53	58.5	24.5	3.8	1.9	3.8	7.5			
TOTAL											
		2,320	945	551	166	15	57	229	280	22	55
			40.7	23.7	7.2	.6	2.5	9.9	12.1	.9	2.4
		1,963	48.1	28.1	8.5	.8	2.9	11.7			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

-	1,963	All Engineering and Engineering-Related Technologies Graduates	76.2	62.7
5	405	Mechanical and Related Technologies	74.5	53.0
6	155	Civil Technologies	72.9	64.9
7	100	Architectural Technologies	71.0	62.2
8	68	Industrial Production Technologies	66.1	39.0
9	16	General Engineering	56.3	46.2
10	9	Environmental Control Technologies	44.4	61.4
11	15	Industrial Engineering	33.3	NA

In contracts to 1983 graduates, it would seem that 1984 associate degree engineering and engineering technology graduates had considerable success in finding degree-related work. The only exceptions were these of graduates who specialized in the Industrial Production Technologies, in Technnical Engineering, in the Environmental Control Technologies, and in Industrial Engineering.

When ranked according to the degree to which the full-time employed graduates found employment in Pennsylvania, the degree fields of Table 1.09 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	12	General Engineering	100.0	90.9
1.5	2	Engineering Physics	100.0	NA
3	15	Industrial Engineering	86.7	NA
4	134	Civil Technologies	77.6	85.9
5	50	Industrial Production Technologies	76.0	94.2
6	867	Electrical and Electronic Technologies	70.7	75.6
7	47	Engineering and Engineering-Related Technologies, Other	70.2	81.8
8	6	Environmental Control Technologies	66.7	79.7
-	1,677	All Engineering and Engineering-Related Technologies Graduates	66.2	77.3
9	128	Electromechanical Instrumentation and Maintenance Technologies	63.3	69.0
10	81	Architectural Technologies	63.0	80.0
11	335	Mechanical and Related Technologies	47.8	73.2

Apparently, when degree-related employment was found in 1984 it was more frequently found outside of Pennsylvania than it was in 1983. Electromechanical Instrumentation and Maintenance Technologies graduates have particularly tended to find employment outside Pennsylvania.

Results for Associate Degree Graduates in the Allied Health Professions

Table 1.10 gives a detailed summary of degree fields that are found within the major discipline area of Allied Health found in Table 1.0. Many of these represent professions for which the Associate Degree is considered the appropriate degree for those preparing to work in the allied health profession in question.

TABLE 1.10

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
DENTAL ASSISTING											
	#	16	11	0	0	0	1	1	2	0	1
	%		68.8	.0	.0	.0	6.3	6.3	12.5	.0	6.3
	%	13	84.6	.0	.0	.0	7.7	7.7			
DENTAL HYGIENE											
	#	65	42	2	0	0	10	1	7	0	3
	%		64.6	3.1	.0	.0	15.4	1.5	10.8	.0	4.6
	%	55	76.4	3.6	.0	.0	18.2	1.8			
CARDIOVASCULAR TECHNOLOGY											
	#	4	3	1	0	0	0	0	0	0	0
	%		75.0	25.0	.0	.0	.0	.0	.0	.0	.0
	%	4	75.0	25.0	.0	.0	.0	.0			
EMERGENCY MEDICAL TECHNOLOGY-PARAMEDIC											
	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
MEDICAL RADIATION DOSIMETRY											
	#	6	5	1	0	0	0	0	0	0	0
	%		83.3	16.7	.0	.0	.0	.0	.0	.0	.0
	%	6	83.3	16.7	.0	.0	.0	.0			
NUCLEAR MEDICAL TECHNOLOGY											
	#	4	3	1	0	0	0	0	0	0	0
	%		75.0	25.0	.0	.0	.0	.0	.0	.0	.0
	%	4	75.0	25.0	.0	.0	.0	.0			
RADIOLOGIC (MEDICAL) TECHNOLOGY											
	#	84	41	7	2	0	13	15	6	0	0
	%		48.8	8.3	2.4	.0	15.5	17.9	7.1	.0	.0
	%	78	52.6	9.0	2.6	.0	16.7	19.2			
RESPIRATORY THERAPY TECHNOLOGY											
	#	25	20	5	0	0	0	0	0	0	0
	%		80.0	20.0	.0	.0	.0	.0	.0	.0	.0
	%	25	80.0	20.0	.0	.0	.0	.0			

TABLE 1.10

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
SURGICAL TECHNOLOGY	#	22	9	0	2	0	5	4	0	0	2
	%		40.9	.0	9.1	.0	22.7	18.2	.0	.0	9.1
	%	20	45.0	.0	10.0	.0	25.0	20.0			
DIAGNOSTIC MEDICAL SONOGRAPHY	#	8	6	1	1	0	0	0	0	0	0
	%		75.0	12.5	12.5	.0	.0	.0	.0	.0	.0
	%	8	75.0	12.5	12.5	.0	.0	.0			
MEDICAL LABORATORY TECHNOLOGY	#	114	63	7	9	0	5	17	6	0	7
	%		55.3	6.1	7.9	.0	4.4	14.9	5.3	.0	6.1
	%	101	62.4	6.9	8.9	.0	5.0	16.8			
MEDICAL LABORATORY TECHNOLOGIES, OTHER	#	13	6	1	1	0	2	2	0	0	1
	%		46.2	7.7	7.7	.0	15.4	15.4	.0	.0	7.7
	%	12	50.0	8.3	8.3	.0	16.7	16.7			
MENTAL HEALTH/HUMAN SERVICES ASSISTING	#	19	7	1	0	0	5	1	4	0	1
	%		36.8	5.3	.0	.0	26.3	5.3	21.1	.0	5.3
	%	14	50.0	7.1	.0	.0	35.7	7.1			
MENTAL HEALTH/HUMAN SERVICES TECHNOLOGY	#	24	9	1	5	0	2	3	4	0	0
	%		37.5	4.2	20.8	.0	8.3	12.5	16.7	.0	.0
	%	20	45.0	5.0	25.0	.0	10.0	15.0			
ANIMAL TECHNOLOGY	#	5	4	0	1	0	0	0	0	0	0
	%		80.0	.0	20.0	.0	.0	.0	.0	.0	.0
	%	5	80.0	.0	20.0	.0	.0	.0			
MEDICAL ASSISTING	#	116	83	7	6	0	11	7	1	0	1
	%		71.6	6.0	5.2	.0	9.5	6.0	.9	.0	.9
	%	114	72.8	6.1	5.3	.0	9.6	6.1			

TABLE 1.10

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
MEDICAL OFFICE MANAGEMENT	#	41	17	0	4	0	7	5	7	0	1
	%		41.5	.0	9.8	.0	17.1	12.2	17.1	.0	2.4
	%	33	51.5	.0	12.1	.0	21.2	15.2			
MEDICAL RECORDS TECHNOLOGY	#	24	16	0	1	0	3	3	1	0	0
	%		66.7	.0	4.2	.0	12.5	12.5	4.2	.0	.0
	%	23	69.6	.0	4.3	.0	13.0	13.0			
PHARMACY ASSISTING	#	4	2	0	0	0	0	0	0	0	2
	%		50.0	.0	.0	.0	.0	.0	.0	.0	50.0
	%	2	100.0	.0	.0	.0	.0	.0			
PHYSICIAN ASSISTING	#	3	2	0	0	0	0	0	0	0	1
	%		66.7	.0	.0	.0	.0	.0	.0	.0	33.3
	%	2	100.0	.0	.0	.0	.0	.0			
NURSING ASSISTING	#	16	9	0	1	0	1	3	1	0	1
	%		56.3	.0	6.3	.0	6.3	18.8	6.3	.0	6.3
	%	14	64.3	.0	7.1	.0	7.1	21.4			
PRACTICAL NURSING	#	256	159	8	10	0	30	24	18	1	6
	%		62.1	3.1	3.9	.0	11.7	9.4	7.0	.4	2.3
	%	231	68.8	3.5	4.3	.0	13.0	10.4			
OPHTHALMIC SERVICES, OTHER	#	8	8	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	8	100.0	.0	.0	.0	.0	.0			
OCCUPATIONAL THERAPY ASSISTING	#	21	17	2	0	0	0	1	0	0	1
	%		81.0	9.5	.0	.0	.0	4.8	.0	.0	4.8
	%	20	85.0	10.0	.0	.0	.0	5.0			

TABLE 1.10

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
PHYSICAL THERAPY ASSISTING	#	52	37	4	2	0	3	2	4	0	0
	%		71.2	7.7	3.8	.0	5.8	3.8	7.7	.0	.0
	%	48	77.1	8.3	4.2	.0	6.3	4.2			
RECREATIONAL THERAPY	#	14	6	1	3	0	3	0	0	0	1
	%		42.9	7.1	21.4	.0	21.4	.0	.0	.0	7.1
	%	13	46.2	7.7	23.1	.0	23.1	.0			
RESPIRATORY THERAPY	#	31	23	0	1	0	3	1	3	0	0
	%		74.2	.0	3.2	.0	9.7	3.2	9.7	.0	.0
	%	28	82.1	.0	3.6	.0	10.7	3.6			
ALLIED HEALTH, OTHER	#	2	0	0	0	0	0	2	0	0	0
	%		.0	.0	.0	.0	.0	100.0	.0	.0	.0
	%	2	.0	.0	.0	.0	.0	100.0			
TOTAL		998	609	50	49	0	104	92	64	1	29
			61.0	5.0	4.9	.0	10.4	9.2	6.4	.1	2.9
		904	67.4	5.5	5.4	.0	11.5	10.2			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

When the twenty-eight degree fields of Table 1.10 are listed on the basis of the proportion of their graduates finding full-time, degree-related employment in the Civilian Labor Market, they are ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
4.5	4	Cardiopulmonary Technology	100.0	100.0
4.5	1	Emergency Medical Technology - Paramedical	100.0	80.0
4.5	6	Medical Radiation Dosimetry	100.0	100.0
4.5	4	Nuclear Medical Technology	100.0	100.0
4.5	8	Opthalmic Services, Other	100.0	NA
4.5	2	Pharmacy Assisting	100.0	90.9
4.5	2	Physician Assistance - Primary Care	100.0	90.9
4.5	25	Respiratory Therapy Technology	100.0	100.0
9	20	Occupational Therapy Assisting	95.0	100.0
10	8	Ultrasound Technology	87.5	100.0
11	48	Physical Therapy Assisting	85.4	100.0
12	13	Dental Assisting	84.6	92.9
13	28	Respiratory Therapy	82.1	100.0
14.5	5	Animal Technology	80.0	NA
14.5	55	Dental Hygiene	80.0	77.5
16	114	Medical Assisting	78.9	78.4
-	904	All Allied Health Graduates	72.9	80.1
17	231	Practical Nursing	72.3	83.1
18	23	Medical Records Technology	69.6	88.9
19	101	Medical Laboratory Technology	69.3	73.2
20	14	Nursing Assisting	64.3	57.1
21	78	Radiograph Medical Technology	61.6	86.5
22	12	Medical Laboratory Technologies, Other	58.3	25.0
23	14	Mental Health/Human Services Assisting	57.1	88.9
24	13	Recreational Therapy	53.9	55.6
25	33	Medical Office Management	51.5	28.6
26	20	Mental Health/Human Services Technology	50.0	NA
27	20	Surgical Technology	45.0	33.3
28	2	Allied Health, Other	0.0	60.9

It seems obvious from the above rankings that in 1984 there was evidence of a weakened but still relatively strong demand for allied health specialities but there were, also, degree fields for which relatively little job-related demand at the associate degree level was in evidence, e.g., Surgical Technology, Allied Health, Other, Mental Health/Human Services, Technologies, and Recreational Therapy.

When placed in order according to the proportion of full-time employed associate degree graduates who were employed in Pennsylvania, the degree fields of Table 1.10 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
6	5	Animal Technology	100.0	NA
6	11	Dental Assisting	100.0	100.0
6	1	Emergency Medical Technology - Paramedical	100.0	100.0
6	21	Medical Office, Management	100.0	100.0
6	17	Medical Records Technology	100.0	96.2
6	10	Nursing Assisting	100.0	100.0
6	8	Opthalmic Services, Other	100.0	NA
6	2	Pharmacy Assisting	100.0	100.0
6	2	Physician Assisting - Primary Care	100.0	80.0
6	24	Respiratory Therapy	100.0	84.8
6	11	Surgical Technology	100.0	100.0
12.5	177	Practical Nursing	95.5	95.3
12.5	44	Dental Hygiene	95.5	100.0
14	15	Mental Health/Human Services Technology	93.3	NA
-	708	All Allied Health Graduates	92.9	90.3
15	96	Medical Assisting	92.7	91.9
16	79	Medical Laboratory Technology	91.1	88.8
17	43	Physical Therapy Assisting	90.7	89.2
18	10	Recreational Therapy	90.0	100.0
19	19	Occupational Therapy Assisting	89.5	88.2
21	8	Medical Laboratory Technologies, Other	87.5	100.0
21	8	Medical Health/Human Services Assisting	87.5	100.0
21	8	Ultrasound Technology	87.5	100.0
23	50	Radiograph Medical Technology	86.0	92.3
24	6	Medical Radiation Dosimetry	83.3	33.3
25	25	Respiratory Therapy Technology	80.0	76.2
26.5	4	Cardiopulmonary Technology	75.0	80.0
26.5	4	Nuclear Medical Technology	75.0	93.3
NA	0	Allied Health, Other	NA	100.0

It is clear that graduates in the allied health fields have a high rate of Pennsylvania employment, with the lower ranked degree fields responding to strong national rather than state labor market demands.

Results for Associate Degree Graduates in the Health Sciences

At the associate degree level the primary Health Science degree field is that of Nursing (R.N.) (see Table 1.11). Not unexpectedly, Table 1.11 indicates that 75.1 percent of the full-time employed associate degree graduates in Nursing who entered the Civilian Labor Market found degree-related employment. This represents, however, a marked drop from the figure of 90.3 percent for the graduates of 1983. Of those who found full-time employment, 93.0 percent obtained their employment in Pennsylvania. Obviously, Pennsylvania is not only a major producer of nurses, at the Associate and Baccalaureate Degree levels, but is also a major utilizer of its own product.

TABLE 1.11

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES IN THE HEALTH SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
NURSING	#	752	438	34	12	0	112	32	106	1	17
	%		58.2	4.5	1.6	.0	14.9	4.3	14.1	.1	2.3
	%	628	69.7	5.4	1.9	.0	17.8	5.1			
PRE-PHARMACY	#	2	0	0	0	0	0	0	2	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
TOTAL		754	438	34	12	0	112	32	108	1	17
			58.1	4.5	1.6	.0	14.9	4.2	14.3	.1	2.3
		628	69.7	5.4	1.9	.0	17.8	5.1			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

Results for Associate Degree Graduates in the Physical Sciences and the Physical Science Technologies

Table 1.12 summarizes the findings for Associate Degree graduates in the Physical Sciences and in the Physical Science Technologies. There are relatively few graduates in these areas who enter the Civilian Labor Market since the Physical Science degree is not typically considered a terminal degree for employment in the physical sciences. Nevertheless, it is worthwhile to ask what happens to those Physical Science graduates who do enter the labor market.

When the degree fields of Table 1.12 were ranked according to the proportion of 1983-84 graduates in the Civilian Labor Market who found full-time, degree-related employment, the Physical Science degree fields of Table 1.12 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	2	Chemistry	100.0	0.0
1.5	22	Science Technologies, Other	100.0	NA
-	52	All Physical Science and Physical Science Technologies Graduates	90.4	73.6
3	23	Nuclear Technologies	82.6	71.4
4	5	Physical Science Technologies	80.0	83.4

The degree fields of "Physical Sciences, General" and "Physics" are not shown here since there were no graduates who entered the labor market. The graduates who were listed under these categories had, in fact, gone on for an advanced degree. As can be seen, there was, however, a marked increase in full-time civilian Labor Market employment in 1984 compared to the 1983 figure of 73.6 percent for the physical science graduates in general.

When ranked according to the proportion of full-time employed graduates finding full-time employment in Pennsylvania, the degree fields of Table 1.12 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	2	Chemistry	100.0	100.0
1.5	4	Physical Science Technologies	100.0	81.8
3	21	Nuclear Technologies	85.7	100.0
-	49	All Physical Science and Physical Science/Technologies Graduates	81.6	90.9
4	22	Science Technologies, Other	72.7	NA

As with graduates in the Allied Health and Health Science disciplines, there is still a strong tendency for these graduates to find Pennsylvania based employment, although not as strong as in 1983 where 90.9 percent found Pennsylvania employment.

TABLE 1.12

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE HELD FOR ASSOCIATE DEGREE GRADUATES IN THE PHYSICAL SCIENCES AND THE PHYSICAL SCIENCE TECHNOLOGIES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
PHYSICAL SCIENCES											
PHYSICAL SCIENCES, GENERAL	#	7	0	0	0	0	0	0	7	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
CHEMISTRY	#	3	2	0	0	0	0	0	1	0	0
	%		66.7	.0	.0	.0	.0	.0	33.3	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
PHYSICS	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
*TOTAL PHYSICAL SCIENCES		11	2	0	0	0	0	0	9	0	0
			18.2	.0	.0	.0	.0	.0	81.8	.0	.0
		2	100.0	.0	.0	.0	.0	.0			
SCIENCE TECHNOLOGIES											
NUCLEAR TECHNOLOGIES	#	24	16	3	2	0	0	2	0	0	1
	%		66.7	12.5	8.3	.0	.0	8.3	.0	.0	4.2
	%	23	69.6	13.0	8.7	.0	.0	8.7			
PHYSICAL SCIENCE TECHNOLOGIES	#	5	4	0	0	0	0	1	0	0	0
	%		80.0	.0	.0	.0	.0	20.0	.0	.0	.0
	%	5	80.0	.0	.0	.0	.0	20.0			
SCIENCE TECHNOLOGIES, OTHER	#	26	16	6	0	0	0	0	2	1	1
	%		61.5	23.1	.0	.0	.0	.0	7.7	3.8	3.8
	%	22	72.7	27.3	.0	.0	.0	.0			

TABLE 1.12

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE HELD FOR ASSOCIATE DEGREE GRADUATES IN THE PHYSICAL SCIENCES AND THE PHYSICAL SCIENCE TECHNOLOGIES, 1984

	TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
*TOTAL SCIENCE TECHNOLOGIES										
	55	36	9	2	0	0	3	2	1	2
		65.5	16.4	3.6	.0	.0	5.5	3.6	1.8	3.6
	50	72.0	18.0	4.0	.0	.0	6.0			
TOTAL										
	66	38	9	2	0	0	3	11	1	2
		57.6	13.6	3.0	.0	.0	4.5	16.7	1.5	3.0
	52	73.1	17.3	3.8	.0	.0	5.8			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

Results for Associate Degree Graduates in the Social Sciences

Here again, in Table 1.13 the degree fields shown are not usually considered to be terminal degrees that lead to degree-related employment. As a consequence, the number of associate degree graduates in these fields tends to be relatively small, especially the number of graduates entering the Civilian Labor Market. Nevertheless, it was considered to be worthwhile to see what happened to those Social Science graduates who did enter the Civilian Labor Market.

When the Associate Degree fields of Table 1.13 were ranked according to the proportion of graduates in the Civilian Labor Market obtaining full-time, degree-related employment, the degree fields of Table 1.13 were ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	10	Social Sciences, Other	40.0	0.0
-	24	All Social Science Graduates	29.2	53.8
2	12	Social Sciences, General	25.0	50.0
3.5	1	Criminology	0.0	100.0
3.5	1	Sociology	0.0	100.0

As might be expected, a very large proportion of the graduates of Table 1.13 went on for advanced degrees. For those who did choose to seek employment, the picture was one of sharply reduced degree-related employment in 1984.

No ranking of the Social Sciences degree fields of Table 1.13 with regard to Pennsylvania employment was needed since, as in 1983, all of the Pennsylvania graduates in Table 1.13 were reported as having found full-time employment (Social Sciences, General and Social Sciences, Other).

Results for Associate Degree Graduates in Construction, Industrial, Transportation and Repair-Related Programs

An important mission of the associate degree programs in Pennsylvania involves the training of students for entry into occupations for which these associate degree programs are a direct preparation.

When the degree fields of Table 1.14 were ranked according to the proportion of associate degree graduates finding full-time, degree-related employment upon their entry into the Civilian Labor Market, the degree fields of Table 1.14 ranked as follows:

TABLE 1.13

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR ASSOCIATE DEGREE GRADUATES IN THE SOCIAL SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
SOCIAL SCIENCES, GENERAL	#	19	3	0	4	0	3	2	6	0	1
	%		15.8	.0	21.1	.0	15.8	10.5	31.6	.0	5.3
	%	12	25.0	.0	33.3	.0	25.0	16.7			
CRIMINOLOGY	#	2	0	0	0	0	0	1	1	0	0
	%		.0	.0	.0	.0	.0	50.0	50.0	.0	.0
	%	1	.0	.0	.0	.0	.0	100.0			
SOCIOLOGY	#	2	0	0	0	0	1	0	1	0	0
	%		.0	.0	.0	.0	50.0	.0	50.0	.0	.0
	%	1	.0	.0	.0	.0	100.0	.0			
SOCIAL SCIENCES, OTHER	#	26	4	0	1	0	5	0	16	0	0
	%		15.4	.0	3.8	.0	19.2	.0	61.5	.0	.0
	%	10	40.0	.0	10.0	.0	50.0	.0			
TOTAL		49	7	0	5	0	9	3	24	0	1
			14.3	.0	10.2	.0	18.4	6.1	49.0	.0	2.0
		24	29.2	.0	20.8	.0	37.5	12.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 1.14

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES WITH CONSTRUCTION, INDUSTRIAL, TRANSPORTATION, AND REPAIR RELATED DEGREES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
CONSTRUCTION TRADES											
CARPENTRY											
	#	70	50	4	2	0	3	7	2	1	1
	%		71.4	5.7	2.9	.0	4.3	10.0	2.9	1.4	1.4
	%	66	75.8	6.1	3.0	.0	4.5	10.6			
ELECTRICAL AND POWER TRANSMISSION INSTALLATION											
	#	103	46	18	18	1	4	8	5	0	3
	%		44.7	17.5	17.5	1.0	3.9	7.8	4.9	.0	2.9
	%	95	48.4	18.9	18.9	1.1	4.2	8.4			
MISCELLANEOUS CONSTRUCTION TRADES & PROPERTY MAINTENANCE											
	#	37	21	0	3	0	0	9	1	0	3
	%		56.8	.0	8.1	.0	.0	24.3	2.7	.0	8.1
	%	33	63.6	.0	9.1	.0	.0	27.3			
PLUMBING, PIPEFITTING, AND STEAMFITTING											
	#	50	37	4	1	0	1	2	5	0	0
	%		74.0	8.0	2.0	.0	2.0	4.0	10.0	.0	.0
	%	45	82.2	8.9	2.2	.0	2.2	4.4			
CONSTRUCTION TRADES, OTHER											
	#	60	43	3	5	0	2	2	5	0	0
	%		71.7	5.0	8.3	.0	3.3	3.3	8.3	.0	.0
	%	55	78.2	5.5	9.1	.0	3.6	3.6			
*TOTAL CONSTRUCTION TRADES											
		320	197	29	29	1	10	28	18	1	7
			61.6	9.1	9.1	.3	3.1	8.7	5.6	.3	2.2
		294	67.0	9.9	9.9	.3	3.4	9.5			
MECHANICS AND REPAIRERS											
ELECTRICAL AND ELECTRONICS EQUIPMENT REPAIR											
	#	30	12	13	0	0	1	2	2	0	0
	%		40.0	43.3	.0	.0	3.3	6.7	6.7	.0	.0
	%	28	42.9	46.4	.0	.0	3.6	7.1			

TABLE 1.14

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES WITH CONSTRUCTION, INDUSTRIAL, TRANSPORTATION, AND REPAIR RELATED DEGREES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
MECHANICS AND REPAIRERS											
HEATING, AIR CONDITIONING, AND REFRIGERATION MECHANICS	#	167	68	34	10	2	3	32	9	2	7
	%		40.7	20.4	6.0	1.2	1.8	19.2	5.4	1.2	4.2
	%	149	45.6	22.8	6.7	1.3	2.0	21.5			
VEHICLE AND MOBILE EQUIPMENT MECHANICS AND REPAIRERS	#	182	113	14	20	3	6	15	3	8	0
	%		62.1	7.7	11.0	1.6	3.3	8.2	1.6	4.4	0
	%	171	66.1	8.2	11.7	1.8	3.5	8.8			
MECHANICS AND REPAIRERS, OTHER	#	99	60	22	4	2	4	6	0	1	0
	%		60.6	22.2	4.0	2.0	4.0	6.1	.0	1.0	.0
	%	98	61.2	22.4	4.1	2.0	4.1	6.1			
*TOTAL MECHANICS AND REPAIRERS		478	253	83	34	7	14	55	14	11	7
			52.9	17.4	7.1	1.5	2.9	11.5	2.9	2.3	1.5
		446	56.7	18.6	7.6	1.6	3.1	12.3			
PRECISION PRODUCTION											
DRAFTING	#	229	114	46	17	2	6	13	15	3	13
	%		49.8	20.1	7.4	.9	2.6	5.7	6.6	1.3	5.7
	%	198	57.6	23.2	8.6	1.0	3.0	6.6			
GRAPHIC AND PRINTING COMMUNICATIONS	#	214	84	67	16	4	4	19	13	0	7
	%		39.3	31.3	7.5	1.9	1.9	8.9	6.1	.0	3.3
	%	194	43.3	34.5	8.2	2.1	2.1	9.8			
PRECISION METAL WORK	#	206	140	26	9	1	3	12	11	3	1
	%		68.0	12.6	4.4	.5	1.5	5.8	5.3	1.5	.5
	%	191	73.3	13.6	4.7	.5	1.6	6.3			

TABLE 1.14

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR ASSOCIATE DEGREE GRADUATES WITH CONSTRUCTION, INDUSTRIAL, TRANSPORTATION, AND REPAIR RELATED DEGREES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
PRECISION PRODUCTION WOODWORKING											
	#	3	2	0	1	0	0	0	0	0	0
	%		66.7	.0	33.3	.0	.0	.0	.0	.0	.0
	%	3	66.7	.0	33.3	.0	.0	.0			
*TOTAL PRECISION PRODUCTION											
		652	340	139	43	7	13	44	39	6	21
			52.1	21.3	6.6	1.1	2.0	6.7	6.0	.9	3.2
		586	58.0	23.7	7.3	1.2	2.2	7.5			
TRANSPORTATION AND MATERIAL MOVING AIR TRANSPORTATION											
	#	18	9	1	2	1	0	0	5	0	0
	%		50.0	5.6	11.1	5.6	.0	.0	27.8	.0	.0
	%	13	69.2	7.7	15.4	7.7	.0	.0			
TRANSPORTATION AND MATERIAL MOVING, OTHER											
	#	15	2	0	3	0	0	0	10	0	0
	%		13.3	.0	20.0	.0	.0	.0	66.7	.0	.0
	%	5	40.0	.0	60.0	.0	.0	.0			
*TOTAL TRANSPORTATION AND MATERIAL MOVING											
		33	11	1	5	1	0	0	15	0	0
			33.3	3.0	15.2	3.0	.0	.0	45.5	.0	.0
		18	61.1	5.6	27.8	5.6	.0	.0			
TOTAL											
		1,483	801	252	111	16	37	127	86	18	35
			54.0	17.0	7.5	1.1	2.5	8.6	5.8	1.2	2.4
		1,344	59.6	18.8	8.3	1.2	2.8	9.4			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	45	Plumbing, Pipefitting, and Steamfitting	91.1	72.7
2	28	Electrical and Electronics Equipment Repair	89.3	79.1
3	191	Precision Metal Work	86.9	66.0
4	55	Construction Trades, Other	83.7	56.6
5	98	Mechanics and Repairers, Other	83.6	79.1
6	66	Carpentry	81.9	71.6
7	198	Drafting	80.8	79.7
-	1,344	All Construction, Industrial, Transportation, and Repair-Related Program Graduates	78.4	75.0
8	194	Graphic and Printing Communications	77.8	72.1
9	13	Air Transportation	76.9	85.0
10	171	Vehicle and Mobile Equipment Mechanics and Repairers	74.3	85.0
11	149	Heating, Air Conditioning, and Refrigeration Mechanics	68.4	63.6
12	95	Electrical and Power Transmissions Installation	67.3	80.9
13	3	Woodworking	66.7	100.0
14	33	Miscellaneous Construction Trades	63.6	NA
15	5	Transportation and Material Moving, Other	40.0	80.0

Despite the highly applied nature of these degrees, the 1984 graduate in several of these degree field categories experienced some difficulty in finding Civilian Labor Market, degree-related, full-time employment, e.g., Transportation and Material Moving, Other (40.0%), Miscellaneous Construction Trades (63.6%), Woodworking (66.7%), Electrical and Power Transmission Installation (67.3%), and Heating, Air Conditioning, and Refrigeration Mechanics (68.4%).

When the degree fields of Table 1.14 are ranked according to the proportion of full-time employed graduates who had found a full-time position in Pennsylvania, the degree fields of Table 1.14 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2	24	Miscellaneous Construction Trades	100.0	NA
2	5	Transportation and Material Moving, Other	100.0	100.0
2	3	Woodworking	100.0	100.0
4	51	Construction Trades, Other	94.1	98.0
5	56	Carpentry	92.9	96.5
6	42	Plumbing, Pipefitting, and Steamfitting	90.5	100.0
7	150	Vehicle and Mobile Equipment Mechanics and Repairers	88.7	44.4

8.5	176	Precision Metal Work	84.7	86.6
8.5	13	Air Transportation	84.7	57.9
-	1,180	All Construction, Industrial, Transportation and Repair-Related Programs	77.3	73.8
10	83	Electrical and Power Transmission Installation	77.1	90.2
11	179	Drafting	73.2	87.6
12	88	Mechanics and Repairs, Other	72.7	69.7
13	114	Heating, Air Conditioning, and Refrigeration Mechanics	68.4	94.4
14	171	Graphic and Printing Communications	58.5	56.6
15	25	Electrical and Electronics Equipment Repair	48.0	83.3

As can be seen, the degree fields of Table 1.14 varied considerably in terms of Pennsylvania based employment, with a little over a quarter of these graduates obtaining full-time employment outside of Pennsylvania. Graduates in some of these degree fields had a substantially lower rate of Pennsylvania employment, e.g., Electrical and Electronics Equipment Repair (48.0%), Graphic and Printing Communications (58.5%), and Heating, Air Conditioning, and Refrigeration Mechanics (68.4%). These low ranked degree fields apparently have a strong national market, relative to Pennsylvania's needs.

Results for Associate Degree Graduates in the Visual and Performing Arts

Table 1.15 summarizes detailed degree field findings for the major discipline of Visual and Performing Arts found in Table 1.0. The general picture found in Table 1.15 is one of a relatively low rate of degree-related, full-time employment upon entry into the Civilian Labor Market with a substantial proportion of these graduates going on for an advanced degree rather than seeking employment. Apparently, associate degrees in these fields are not typically considered to be terminal degrees.

When the degree-fields of Table 1.15 were ranked according to the proportion of 1983 graduates finding degree-related, full-time employment in the Civilian Labor Market, the degree fields of Table 1.15 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	34	Graphic Arts Technology	58.8	75.0
2	15	Music	53.3	NA
-	62	All Visual and Performing Arts, Graduates	48.4	28.6
3	7	Fine Arts	28.6	50.0
5	3	Visual and Performing Arts, General	0.0	0.0
5	1	Dramatic Arts	0.0	0.0
5	2	Visual and Performing Arts, Other	0.0	42.9

TABLE 1.15

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR ASSOCIATE DEGREE GRADUATES IN THE VISUAL AND PERFORMING ARTS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
VISUAL AND PERFORMING ARTS, GENERAL	#	12	0	0	2	0	1	0	9	0	0
	%		.0	.0	16.7	.0	8.3	.0	75.0	.0	.0
	%	3	.0	.0	66.7	.0	33.3	.0			
DESIGN	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
DRAMATIC ARTS	#	1	0	0	1	0	0	0	0	0	0
	%		.0	.0	100.0	.0	.0	.0	.0	.0	.0
	%	1	.0	.0	100.0	.0	.0	.0			
FINE ARTS	#	17	2	0	3	0	2	0	7	0	3
	%		11.8	.0	17.6	.0	11.8	.0	41.2	.0	17.6
	%	7	28.6	.0	42.9	.0	28.6	.0			
GRAPHIC ARTS TECHNOLOGY	#	45	18	2	7	0	3	4	8	1	2
	%		40.0	4.4	15.6	.0	6.7	8.9	17.8	2.2	4.4
	%	34	52.9	5.9	20.6	.0	8.8	11.8			
MUSIC	#	31	8	0	1	0	4	2	14	1	1
	%		25.8	.0	3.2	.0	12.9	6.5	45.2	3.2	3.2
	%	15	53.3	.0	6.7	.0	26.7	13.3			
VISUAL AND PERFORMING ARTS, OTHER	#	2	0	0	1	1	0	0	0	0	0
	%		.0	.0	50.0	50.0	.0	.0	.0	.0	.0
	%	2	.0	.0	50.0	50.0	.0	.0			
TOTAL		109	28	2	15	1	10	6	39	2	6
			25.7	1.8	13.8	.9	9.2	5.5	35.8	1.8	5.5
		62	45.2	3.2	24.2	1.6	16.1	9.7			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

Overall, there was a marked increase in degree related employment from 1983 to 1984, i.e., from 28.6 percent to 48.4 percent.

When ranked according to the proportion of full-time employed graduates who found full-time employment in Pennsylvania, the degree fields of Table 1.15 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2.5	2	Visual and Performing Arts, General	100.0	100.0
2.5	1	Dramatic Arts	100.0	NA
2.5	5	Fine Arts	100.0	100.0
2.5	9	Music	100.0	NA
-	46	All Visual and Performing Arts Graduates	93.5	75.0
5	27	Graphic Arts Technology	92.6	75.0
6	2	Visual and Performing Arts, Other	50.0	100.0

These rankings suggest that visual and performing arts graduates tended to seek and find their employment entirely in Pennsylvania with the possible exception of associate degree graduates in Visual and Performing Arts, Other (50.0%).

SOME COMMENTS ON THE FINDINGS FOR ASSOCIATE DEGREE GRADUATES

Despite the recent economic recession, the associate degree graduate has continued to be able to find degree-related employment at a level close to that of prior years. One interesting development, however, is the marked reduction in the proportion going on for an advanced degree. It may be conjectured that a larger proportion of those seeking an associate degree are now vocationally oriented in contrast to past years when there was a larger proportion planning on transfer to a four-year institution.

The new CIP code has permitted a more detailed look at associate degree post-graduate activity than was possible in the past. This will, as time passes, permit the development of time-trends for a greater variety of associate degree fields than in the past. Unfortunately, the shift from the old HEGIS four-digit code to the new CIP six-digit code in 1984 resulted in such a dramatic change in program classifications at this degree level that a table reflecting degree-specific time trends could not be prepared at this time. The last section of this report does, however, give time trend data for higher level degree graduates where the degree program definitions have remained relatively stable.

VIII. RESULTS FOR BACCALAUREATE DEGREE GRADUATES

Table 2.0, on the pages that follow, summarizes the postgraduate activity of the baccalaureate graduates of 1983-84 in terms of the broadest (2-digit level) Classification of Instructional Programs (CIP) categories available. As before, a more detailed analysis of selected major disciplines from Table 2.0 will be made using a combination of the four-digit and six-digit levels of the CIP classification system.

The findings of Table 2.0 are given in terms of two separate percentage distributions that accompany the numerical counts for a given major discipline area. Numerical counts are shown for each of the postgraduate activity categories used in this study. The first of the two percentage distributions is simply the percentage of reported graduates in each type of activity. The second percentage distribution indicates the percentage of graduates in the Civilian Labor Market engaged in employment-related activity, i.e., it excludes those in military service, those pursuing an advanced degree, and those engaged in activity unrelated to employment were excluded.

For each of the major disciplines, the findings are given in terms of: (1) the number of graduates who found degree-related employment in Pennsylvania, (2) the number of graduates who found degree-related employment outside of Pennsylvania, (3) the number of graduates who found employment in Pennsylvania that was unrelated to their degree field, (4) the number of graduates who found employment outside of Pennsylvania that was unrelated to their degree field, (5) the number of graduates who found part-time employment, (6) the number of graduates who were unemployed and still seeking employment, (7) the number of graduates who had entered military service, (8) the number of graduates who were pursuing an advanced degree and, finally, (9) the number of graduates who were engaged in other activities, i.e., those not employed and not in graduate school but who were also not seeking employment.

Below is a comparison of selected measures on the baccalaureate graduates of 1976-77 through 1983-84.

Year	Reported Graduates	Full-Time Employed	Part-Time Employed	Un-employed	Seeking Advanced Degree	Full-Time Employed In Field Prepared	Full-Time Employed In Pa.
		%	%	%	%	%	%
1977	29,140	62.0	5.8	15.9	16.3	75.5	69.6
1978	28,273	66.0	4.4	12.8	16.8	77.3	68.5
1979	29,818	69.5	4.2	9.6	16.7	77.6	67.4
1980	32,858	70.3	4.0	10.0	15.7	80.8	67.0
1981	31,941	67.6	4.7	11.7	16.0	75.9	66.1
1982	24,176	62.9	5.4	14.3	16.2	80.4	66.0
1983	25,528	61.7	6.7	13.1	15.6	80.6	64.9
1984	29,501	63.0	5.3	10.7	15.2	82.3	63.1

TABLE 2.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
01 AGRIBUSINESS AND AGRICULTURAL PRODUCTION	#	45	11	9	5	4	3	6	6	0	1
	%		24.4	20.0	11.1	8.9	6.7	13.3	13.3	.0	2.2
	%	38	28.9	23.7	13.2	10.5	7.9	15.8			
02 AGRICULTURAL SCIENCES	#	345	118	106	31	12	13	22	39	3	1
	%		34.2	30.7	9.0	3.5	3.8	6.4	11.3	.9	.3
	%	302	39.1	35.1	10.3	4.0	4.3	7.3			
03 RENEWABLE NATURAL RESOURCES	#	103	26	13	16	10	2	26	8	1	1
	%		25.2	12.6	15.5	9.7	1.9	25.2	7.8	1.0	1.0
	%	93	28.0	14.0	17.2	10.8	2.2	28.0			
04 ARCHITECTURE AND ENVIRONMENTAL DESIGN	#	172	65	58	3	2	3	23	14	0	4
	%		37.8	33.7	1.7	1.2	1.7	13.4	8.1	.0	2.3
	%	154	42.2	37.7	1.9	1.3	1.9	14.9			
05 AREA AND ETHNIC STUDIES	#	35	2	4	8	8	2	3	5	0	3
	%		5.7	11.4	22.9	22.9	5.7	8.6	14.3	.0	8.6
	%	27	7.4	14.8	29.6	29.6	7.4	11.1			
06 BUSINESS AND MANAGEMENT	#	6,635	2,902	1,472	428	182	218	821	401	61	150
	%		43.7	22.2	6.5	2.7	3.3	12.4	6.0	.9	2.3
	%	6,023	48.2	24.4	7.1	3.0	3.6	13.6			
07 BUSINESS AND OFFICE	#	149	87	20	5	1	6	28	1	1	0
	%		58.4	13.4	3.4	.7	4.0	18.8	.7	.7	.0
	%	147	59.2	13.6	3.4	.7	4.1	19.0			

TABLE 2.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
08 MARKETING AND DISTRIBUTION	#	386	162	49	23	5	23	86	16	4	18
	%		42.0	12.7	6.0	1.3	6.0	22.3	4.1	1.0	4.7
	%	348	46.6	14.1	6.6	1.4	6.6	24.7			
09 COMMUNICATIONS	#	1,098	348	194	118	73	87	173	69	13	23
	%		31.7	17.7	10.7	6.6	7.9	15.8	6.3	1.2	2.1
	%	993	35.0	19.5	11.9	7.4	8.8	17.4			
10 COMMUNICATIONS TECHNOLOGIES	#	68	28	12	8	0	6	8	5	0	1
	%		41.2	17.6	11.8	.0	8.8	11.8	7.4	.0	1.5
	%	62	45.2	19.4	12.9	.0	9.7	12.9			
11 COMPUTER AND INFORMATION SCIENCES	#	1,165	507	319	56	13	37	156	41	21	15
	%		43.5	27.4	4.8	1.1	3.2	13.4	3.5	1.8	1.3
	%	1,088	46.6	29.3	5.1	1.2	3.4	14.3			
13 EDUCATION	#	3,207	1,161	578	304	64	396	311	296	17	80
	%		36.2	18.0	9.5	2.0	12.3	9.7	9.2	.5	2.5
	%	2,814	41.3	20.5	10.8	2.3	14.1	11.1			
14 ENGINEERING	#	2,309	543	1,054	66	44	10	292	201	96	3
	%		23.5	45.6	2.9	1.9	.4	12.6	8.7	4.2	.1
	%	2,009	27.0	52.5	3.3	2.2	.5	14.5			
15 ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES	#	246	113	82	7	1	3	28	10	2	0
	%		45.9	33.3	2.8	.4	1.2	11.4	4.1	.8	.0
	%	234	48.3	35.0	3.0	.4	1.3	12.0			

TABLE 2.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
16 FOREIGN LANGUAGES	#	242	37	28	29	43	7	26	58	6	8
	%		15.3	11.6	12.0	17.8	2.9	10.7	24.0	2.5	3.3
	%	170	21.8	16.5	17.1	25.3	4.1	15.3			
17 ALLIED HEALTH	#	690	307	155	29	9	37	50	75	6	22
	%		44.5	22.5	4.2	1.3	5.4	7.2	10.9	.9	3.2
	%	587	52.3	26.4	4.9	1.5	6.3	8.5			
18 HEALTH SCIENCES	#	1,628	1,003	266	27	35	78	45	131	25	18
	%		61.6	16.3	1.7	2.1	4.8	2.8	8.0	1.5	1.1
	%	1,454	69.0	18.3	1.9	2.4	5.4	3.1			
19 HOME ECONOMICS	#	290	121	56	13	24	14	24	32	0	6
	%		41.7	19.3	4.5	8.3	4.8	8.3	11.0	.0	2.1
	%	252	48.0	22.2	5.2	9.5	5.6	9.5			
20 VOCATIONAL HOME ECONOMICS	#	50	27	12	1	0	1	2	7	0	0
	%		54.0	24.0	2.0	.0	2.0	4.0	14.0	.0	.0
	%	43	62.8	27.9	2.3	.0	2.3	4.7			
22 LAW	#	59	1	12	2	0	1	8	32	1	2
	%		1.7	20.3	3.4	.0	1.7	13.6	54.2	1.7	3.4
	%	24	4.2	50.0	8.3	.0	4.2	33.3			
23 LETTERS	#	830	133	122	109	93	52	121	163	7	30
	%		16.0	14.7	13.1	11.2	6.3	14.6	19.6	.8	3.6
	%	630	21.1	19.4	17.3	14.8	8.3	19.2			

TABLE 2.3

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
24 LIBERAL/GENERAL STUDIES	#	166	49	13	28	14	4	21	27	3	7
	%		29.5	7.8	16.9	8.4	2.4	12.7	16.3	1.8	4.2
	%	129	38.0	10.1	21.7	10.9	3.1	16.3			
25 LIBRARY AND ARCHIVAL SCIENCES	#	30	7	10	2	0	2	3	4	0	2
	%		23.3	33.3	6.7	.0	6.7	10.0	13.3	.0	6.7
	%	24	29.2	41.7	8.3	.0	8.3	12.5			
26 LIFE SCIENCES	#	1,294	193	106	72	28	46	96	686	19	48
	%		14.9	8.2	5.6	2.2	3.6	7.4	53.0	1.5	3.7
	%	541	35.7	19.6	13.3	5.2	8.5	17.7			
27 MATHEMATICS	#	432	106	119	31	16	8	41	78	14	19
	%		24.5	27.5	7.2	3.7	1.9	9.5	18.1	3.2	4.4
	%	321	33.0	37.1	9.7	5.0	2.5	12.8			
30 MULTI/INTERDISCIPLINARY STUDIES	#	305	72	39	28	22	14	32	78	4	16
	%		23.6	12.8	9.2	7.2	4.6	10.5	25.6	1.3	5.2
	%	207	34.8	18.8	13.5	10.6	6.8	15.5			
31 PARKS AND RECREATION	#	47	8	10	6	4	7	8	4	0	0
	%		17.0	21.3	12.8	8.5	14.9	17.0	8.5	.0	.0
	%	43	18.6	23.3	14.0	9.3	16.3	18.6			
38 PHILOSOPHY AND RELIGION	#	204	29	22	28	25	9	9	75	2	5
	%		14.2	10.8	13.7	12.3	4.4	4.4	36.8	1.0	2.5
	%	122	23.8	18.0	23.0	20.5	7.4	7.4			

TABLE 2.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
39 THEOLOGY	#	139	34	25	29	9	4	3	34	0	1
	%		24.5	18.0	20.9	6.5	2.9	2.2	24.5	.0	.7
	%	104	32.7	24.0	27.9	8.7	3.8	2.9			
40 PHYSICAL SCIENCES	#	820	129	114	46	19	14	94	364	17	23
	%		15.7	13.9	5.6	2.3	1.7	11.5	44.4	2.1	2.8
	%	416	31.0	27.4	11.1	4.6	3.4	22.6			
42 PSYCHOLOGY	#	2,231	260	99	142	67	246	106	679	608	24
	%		11.7	4.4	6.4	3.0	11.0	4.8	30.4	27.3	1.1
	%	920	28.3	10.8	15.4	7.3	26.7	11.5			
43 PROTECTIVE SERVICES	#	398	134	39	54	21	30	65	36	15	4
	%		33.7	9.8	13.6	5.3	7.5	16.3	9.0	3.8	1.0
	%	343	39.1	11.4	15.7	6.1	8.7	19.0			
44 PUBLIC AFFAIRS	#	434	154	44	40	27	15	38	94	6	16
	%		35.5	10.1	9.2	6.2	3.5	8.8	21.7	1.4	3.7
	%	318	48.4	13.8	12.6	8.5	4.7	11.9			
45 SOCIAL SCIENCES	#	2,280	437	301	248	192	74	271	597	64	96
	%		19.2	13.2	10.9	8.4	3.2	11.9	26.2	2.8	4.2
	%	1,523	28.7	19.8	16.3	12.6	4.9	17.8			
48 PRECISION PRODUCTION	#	21	10	2	1	0	4	1	1	0	2
	%		47.6	9.5	4.8	.0	19.0	4.8	4.8	.0	9.5
	%	18	55.6	11.1	5.6	.0	22.2	5.6			

TABLE 2.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR BACCALAUREATE DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
50 VISUAL AND PERFORMING ARTS	#	948	214	191	138	45	92	96	128	5	39
	%		22.6	20.1	14.6	4.7	9.7	10.1	13.5	.5	4.1
	%	776	27.6	24.6	17.8	5.8	11.9	12.4			
TOTAL		29,501	9,538	5,755	2,181	1,112	1,568	3,143	4,495	1,021	688
			32.3	19.5	7.4	3.8	5.3	10.7	15.2	3.5	2.3
		23,297	40.9	24.7	9.4	4.8	6.7	13.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

A slightly larger percentage of baccalaureate graduates found full-time employment in 1984 than in 1983 reversing the general pattern of lower full-time employment found in recent years. This is, apparently, a result of the economic upsurge that the country has recently experienced. A decline in part-time employment and in unemployment occurred between 1983 and 1984. Nevertheless, the figures for 1983 and 1984 still contrast unfavorably with those of previous years. There was also a slight reduction in the percentage going on for an advanced degree but the figure of 15.2 percent for 1984 is still not greatly different from that of prior year, with the exception of 1978 and 1979 when there was a slight but temporary rise in the proportion going on for an advanced degree.

When the proportion of full-time employed graduates who obtained employment related to their degree field is examined, we find that there was an appreciable change from the figure for 1983, i.e., 82.3 percent compared with 80.6 percent and that the proportion for this year (1984) is larger than those found for earlier years.

In contrast, a lower proportion of full-time employed graduates are now finding employment in Pennsylvania than was the case in previous years. This may be a continued reflection of the difficulties Pennsylvania has had in retaining and attracting industry and business during the difficult period of economic transition that the state has been enduring.

Bachelor's Degree Graduates Employed Full-Time in Their Field of Preparation

Table 2.01 ranks the major disciplines found in Table 2.0 according to the proportion of baccalaureate graduates who found full-time employment related to their field of preparation. In general, the major disciplines found at the top of Table 2.01 are those that do not have a large proportion of their graduates going on to obtain an advanced degree and/or those that are highly occupation oriented. Those at the bottom of the table tend to be discipline areas that require an advanced degree for degree-related employment as well as having, possibly, a relatively lower level of employment demand in general. These rankings are, moreover, somewhat difficult to interpret because of the substantial numbers going on for a graduate degree.

Full-Time Degree-Related Employment of Bachelor's Degree Graduates in the Civilian Labor Market

While a great many comparisons between the major discipline areas of Table 2.0 could be made, it is clear that the most important question is that of how successful graduates are in a given major discipline when they seek degree-related employment in the Civilian Labor Market rather than go on for a graduate degree. Table 2.02 answers this question by ranking the major disciplines of Table 2.0 according to the percentage of graduates in each major discipline area finding full-time degree-related employment in the Civilian Labor Market.

TABLE 2.01

A RANK ORDERING OF BACCALAUREATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES FINDING FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Engineering and Engineering-Related Technologies	79.3	66.8
2	Vocational Home Economics	78.0	66.7
3	Health Sciences	77.9	77.1
4	Business and Office	71.8	64.3
5	Architecture and Environmental Design	71.5	61.5
6	Computer and Information Sciences	70.9	64.9
7	Engineering	69.2	57.8
8	Allied Health	67.0	76.0
9	Business and Management	65.9	59.9
10	Agricultural Sciences	64.9	66.2
11	Home Economics	61.0	55.1
12	Communications Technologies	58.8	40.0*
13	Precision Production	57.1	73.1
14	Library and Archival Sciences	56.7	76.6
15	Marketing and Distribution	54.7	54.1
16	Education	54.2	48.8
17	Mathematics	52.1	59.8
-	All Graduates	51.8	49.7
18	Communications	49.4	41.4
19	Public Affairs	45.6	42.0
20	Agribusiness and Agricultural Production	44.4	56.2
21	Protective Services	43.5	37.0
22	Visual and Performing Arts	42.7	40.5
23	Theology	42.4	40.6
24	Parks and Recreation	38.3	36.0
25	Renewable Natural Resources	37.9	27.8
26	Liberal/General Studies	37.3	35.9
27	Multi/Interdisciplinary Studies	36.4	33.5
28	Social Sciences	32.4	29.3
29	Letters	30.7	32.4
30	Physical Sciences	29.6	24.9
31	Foreign Languages	26.9	24.2
32	Philosophy and Religion	25.0	27.8
33	Life Sciences	23.1	24.7
34	Law	22.0	4.5
35	Area and Ethnic Studies	17.1	8.8
36	Psychology	16.1	32.8

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED STUDENTS.

TABLE 2.02

A RANK ORDERING OF BACCALAUREATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES IN THE CIVILIAN LABOR MARKET WHO FOUND FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Vocational Home Economics	90.7	81.5
2	Health Sciences	87.3	89.7
3	Engineering and Engineering-Related Technologies	83.3	68.5
4	Architecture and Environmental Design	79.9	67.2
5	Engineering	79.5	71.5
6	Allied Health	78.7	86.1
7	Computer and Informational Sciences	75.9	70.9
8	Agricultural Sciences	74.2	76.2
9	Business and Office	72.8	68.3
10	Business and Management	72.6	65.5
11	Library and Archival Sciences	70.8	79.3
12	Home Economics	70.2	62.5
13	Mathematics	70.1	75.8
14	Precision Production	66.7	79.2
-	All Graduates	65.5	61.0
15	Communications Technologies	64.5	40.0*
16	Public Affairs	62.3	51.9
17	Education	61.8	56.2
18	Marketing and Distribution	60.6	57.0
19	Physical Sciences	58.4	50.2
20	Theology	56.7	51.3
21	Life Sciences	55.3	52.0
22	Communications	54.6	44.6
23	Law	54.2	11.1*
24	Multi/Interdisciplinary Studies	53.6	48.2
25	Agribusiness and Agricultural Production	52.6	60.4
26	Visual and Performing Arts	52.2	51.1
27	Protective Services	50.4	45.5
28	Social Sciences	48.5	41.4
29	Liberal/General Studies	48.1	47.8
30.5	Renewable Natural Resources	41.9	37.2
30.5	Parks and Recreation	41.9	37.5
32	Philosophy and Religion	41.8	46.1
33	Letters	40.5	43.3
34	Psychology	39.0	50.2
35	Foreign Languages	38.2	33.6
36	Area and Ethnic Studies	22.2	15.8

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

Inspection of Table 2.02 strongly suggests that the high ranking major disciplines are likely to be those that are highly related to a specific occupation or profession for which the baccalaureate degree tends to be the terminal degree, while the reverse is true for those with lower rankings. The very low ranked major disciplines, however, would seem to be characterized by a currently low degree of labor market demand at this degree level.

Bachelor's Degree Graduates Employed Full-Time in Pennsylvania

Table 2.03 ranks the major discipline fields of Table 2.0 according to the percentage of graduates with full-time employment who found employment in Pennsylvania. The general pattern of Table 2.03 is, as one might expect, one of those disciplines with a strong national labor market ranking lower and those that typically have their graduates employed locally ranking higher. The latter is particularly evident for graduates in the business oriented degree fields and in the health sciences, and for graduates with degrees that are unrelated to specific occupational skills, e.g., Letters, and Liberal/General Studies graduates.

Unemployed Bachelor's Degree Graduates in the Civilian Labor Market

While the general pattern of Table 2.0 is one of baccalaureate graduates finding full-time employment in the civilian labor market, it may be instructive to look at the major discipline fields of Table 2.0 in terms of Civilian Labor Market unemployment rates. Table 2.04, therefore, ranks the major discipline areas of Table 2.0 according to the proportion of graduates in the Civilian Labor Market who were reported as unemployed.

The percentage unemployed figures of Table 2.04 range from 3.1 and 2.9 percent for the Health Sciences and Theology, respectively, to a high of 33.3 for baccalaureate graduates who took a degree program in Law. This is not a surprising finding since Law is normally a first-professional degree that requires graduate study, as can be seen in Table 2.05. The disciplines that ranked high in unemployment are a mix of disciplines that have been affected by the recent economic recession (Business and Office, Marketing and Distribution) and by government funding reductions (Physical Sciences, Parks and Recreation, Renewable Natural Resources, the Social Sciences) along with those disciplines that do not prepare their graduates for a specific occupation. As might also be expected, low unemployment degree fields tend to be those less affected by economic cycles (Allied Health, Health Sciences, Philosophy and Religion, and Theology).

Bachelor's Degree Graduates Pursuing an Advanced Degree

The major discipline areas of Table 2.0 differ widely with respect to the proportion of their graduates going on to obtain an advanced degree. For ease of comparison, Table 2.05 ranks the major disciplines of Table 2.0 on the basis of the proportion of graduates in each major discipline who were reported as pursuing an advanced degree. The disciplines ranking low on Table 2.05 tend to

TABLE 2.03

A RANK ORDERING OF BACCALAUREATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF FULL-TIME EMPLOYED 1983-84 GRADUATES WHO FOUND EMPLOYMENT IN PENNSYLVANIA

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Precision Production	84.6	57.1
2	Business and Office	81.4	88.4
3	Marketing and Distribution	77.4	77.0
4	Health Sciences	77.4	79.5
5	Protective Services	75.8	71.9
6	Communications Technologies	75.0	100.0*
7	Liberal/General Studies	74.0	73.8
8	Public Affairs	73.2	77.1
9	Psychology	70.8	70.6
10	Vocational Home Economics	70.0	67.6
11	Education	69.5	68.6
12	Allied Health	67.2	76.6
13	Business and Management	66.8	67.4
14	Life Sciences	66.4	65.8
15	Theology	64.9	78.3
16	Renewable Natural Resources	64.6	66.7
17	Communications	63.6	66.1
18	Computer and Information Sciences	62.9	62.8
19	Home Economics	62.6	67.5
20	Multi/Interdisciplinary Studies	62.1	57.6
21	Visual and Performing Arts	59.9	62.3
22	Engineering and Engineering-Related Technologies	59.1	58.4
23	Social Sciences	58.1	57.7
24	Physical Sciences	56.8	55.8
25	Agricultural Sciences	55.8	60.8
26	Agribusiness and Agricultural Production	55.2	72.1
27	Philosophy and Religion	54.8	56.7
28	Architecture and Environmental Design	53.1	51.0
29	Letters	53.0	55.4
30	Mathematics	50.4	52.2
31	Parks and Recreation	50.0	76.0
32	Foreign Languages	48.2	52.7
33	Library and Archival Sciences	47.4	69.2
34	Area and Ethnic Studies	45.5	45.5
35	Engineering	35.7	37.5
36	Law	20.0	66.7*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES REPORTED AS FULL-TIME EMPLOYED.

TABLE 2.04

A RANK ORDERING OF BACCALAUREATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1983-84 GRADUATES IN THE CIVILIAN LABOR MARKET

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Law	33.3	44.4*
2	Renewable Natural Resources	28.0	28.2
3	Marketing and Distribution	24.7	21.0
4	Physical Sciences	22.6	25.7
5	Letters	19.2	20.4
6.5	Business and Office	19.0	3.7
6.5	Protective Services	19.0	21.8
8	Parks and Recreation	18.6	29.2
9	Social Sciences	17.8	21.3
10	Life Sciences	17.7	20.9
11	Communications	17.4	18.4
12	Liberal/General Studies	16.3	20.0
13	Agribusiness and Agricultural Production	15.8	17.0
14	Multi/Interdisciplinary Studies	15.5	26.1
15	Foreign Languages	15.3	22.1
16	Architecture and Environmental Design	14.9	17.2
17	Engineering	14.5	21.1
18	Computer and Information Sciences	14.3	14.9
19	Business and Management	13.6	16.3
-	All Graduates	13.5	16.1
20	Communications Technologies	12.9	0.0*
21	Mathematics	12.8	12.4
22	Library and Archival Sciences	12.5	0.0
23	Visual and Performing Arts	12.4	17.6
24	Engineering and Engineering-Related Technologies	12.0	24.6
25	Public Affairs	11.9	18.6
26	Psychology	11.5	14.1
27.5	Area and Ethnic Studies	11.1	26.3
27.5	Education	11.1	13.0
29	Home Economics	9.5	13.6
30	Allied Health	8.5	5.2
31	Philosophy and Religion	7.4	5.8
32	Agricultural Sciences	7.3	7.2
33	Precision Production	5.6	8.3
34	Vocational Home Economics	4.7	9.9
35	Health Sciences	3.1	3.5
36	Theology	2.9	6.6

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

TABLE 2.05

A RANK ORDERING OF BACCALAUREATE DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES PURSUING AN ADVANCED DEGREE

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Law	54.2	54.5
2	Life Sciences	53.0	50.2
3	Physical Sciences	44.4	44.7
4	Philosophy and Religion	36.8	37.0
5	Psychology	30.4	30.9
6	Social Sciences	26.2	23.5
7	Multi/Interdisciplinary Studies	25.6	23.7
8	Theology	24.4	20.8
9	Foreign Languages	24.0	24.7
10	Public Affairs	21.7	16.2
11	Letters	19.6	21.0
12	Mathematics	18.1	17.9
13	Liberal/General Studies	16.3	18.3
-	All Graduates	15.2	15.6
14	Area and Ethnic Studies	14.3	32.4
15	Vocational Home Economics	14.0	12.1
16	Visual and Performing Arts	13.5	17.4
17.5	Agribusiness and Agricultural Production	13.3	7.0
17.5	Library and Archival Sciences	13.3	3.3
19	Agricultural Sciences	11.3	12.0
20	Home Economics	11.0	11.4
21	Allied Health	10.9	9.7
22	Education	9.2	11.7
23	Protective Services	9.0	13.4
24	Engineering	8.7	12.5
25	Parks and Recreation	8.5	2.0
26	Architecture and Environmental Design	8.1	7.1
27	Health Sciences	8.0	12.9
28	Renewable Natural Resources	7.8	16.8
29	Communications Technologies	7.4	0.0*
30	Communications	6.3	5.4
31	Business and Management	6.0	6.6
32	Precision Production	4.8	7.7
33.5	Marketing and Distribution	4.1	3.4
33.5	Engineering and Engineering-Related Technologies	4.1	1.2
35	Computer and Information Sciences	3.5	5.6
36	Business and Office	0.7	2.3

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES.

be occupationally oriented, i.e., toward occupations that do not typically require a degree beyond the baccalaureate, while, as might be expected, the high ranked major disciplines tend to be those that require a graduate degree for degree-related employment.

DETAILED ANALYSES OF SELECTED BACCALAUREATE DEGREE DISCIPLINES

Several of the two-digit level degree discipline categories of Table 2.0 are too generalized for the purposes of this report. A selection of major disciplines from Table 2.0 will now be presented in greater detail using, as needed, four-and six-digit Classification of Instructional Programs (CIP) codes.

Results for Bachelor's Degree Graduates in Agriculture and Renewable Natural Resources

Table 2.06 breaks out the Agriculture and the Renewable Resource categories of Table 2.0 into a variety of more specific degree fields. There are a number of comparisons that could be made between these more specifically defined degree fields, but this report will confine itself only to the rate of full-time degree-related employment in the Civilian Labor Market and the proportion of full-time employed graduates who are employed in Pennsylvania.

In terms of full-time, degree-related, Civilian Labor Market employment, the degree fields of Table 2.06 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	20	Food Sciences	90.0	74.2
2	146	Plant Sciences	82.9	81.6
3	10	Renewable Natural Resources, Other	80.0	NA
4	9	Agricultural Mechanics	66.7	66.7
5	3	Forestry Production and Processing	66.6	66.7
-	433	All Agriculture/Renewable Resources Graduates	65.4	68.1
6	118	Animal Sciences	64.4	72.0
7.5	18	Agricultural Sciences, General	50.0	62.6
7.5	2	Wildlife Management	50.0	NA
9	29	Agricultural Business and Management	48.3	59.1
10	27	Forestry and Related Sciences	40.7	47.6
11	51	Renewable Natural Resources, General	33.3	29.4

The degree field of Wildlife Management has not been included in the above rank order listing because there was only one such graduate reported and that graduate had gone on for an advanced degree.

TABLE 2.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALUREATE DEGREE GRADUATES IN AGRICULTURE AND RENEWABLE NATURAL RESOURCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
AGRIBUSINESS AND AGRICULTURAL PRODUCTION											
AGRICULTURAL BUSINESS AND MANAGEMENT											
	#	35	10	4	3	3	3	6	5	0	1
	%		28.6	11.4	8.6	8.6	8.6	17.1	14.3	.0	2.9
	%	29	34.5	13.8	10.3	10.3	10.3	20.7			
AGRICULTURAL MECHANICS											
	#	10	1	5	2	1	0	0	1	0	0
	%		10.0	50.0	20.0	10.0	.0	.0	10.0	.0	.0
	%	9	11.1	55.6	22.2	11.1	.0	.0			
***TOTAL AGRIBUSINESS AND AGRICULTURAL PRODUCTION**											
		45	11	9	5	4	3	6	6	0	1
			24.4	20.0	11.1	8.9	6.7	13.3	13.3	.0	2.2
		38	28.9	23.7	13.2	10.5	7.9	15.8			
AGRICULTURAL SCIENCES											
AGRICULTURAL SCIENCES, GENERAL											
	#	21	7	2	4	1	1	3	1	2	0
	%		33.3	9.5	19.0	4.8	4.8	14.3	4.8	9.5	.0
	%	18	38.9	11.1	22.2	5.6	5.6	16.7			
ANIMAL SCIENCES											
	#	139	40	36	14	8	9	11	21	0	0
	%		28.8	25.9	10.1	5.8	6.5	7.9	15.1	.0	.0
	%	118	33.9	30.5	11.9	6.8	7.6	9.3			
FOOD SCIENCES											
	#	21	16	2	1	0	0	1	1	0	0
	%		76.2	9.5	4.8	.0	.0	4.8	4.8	.0	.0
	%	20	80.0	10.0	5.0	.0	.0	5.0			
PLANT SCIENCES											
	#	164	55	66	12	3	3	7	16	1	1
	%		33.5	40.2	7.3	1.8	1.8	4.3	9.8	.6	.6
	%	146	37.7	45.2	8.2	2.1	2.1	4.8			

TABLE 2.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALUREATE DEGREE GRADUATES IN AGRICULTURE AND RENEWABLE NATURAL RESOURCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
*TOTAL AGRICULTURAL SCIENCES		345	118	106	31	12	13	22	39	3	1
	%		34.2	30.7	9.0	3.5	3.8	6.4	11.3	.9	.3
	%	302	39.1	35.1	10.3	4.0	4.3	7.3			
RENEWABLE NATURAL RESOURCES											
RENEWABLE NATURAL RESOURCES, GENERAL	#	54	13	4	9	7	2	16	3	0	0
	%		24.1	7.4	16.7	13.0	3.7	29.6	5.6	.0	.0
	%	51	25.5	7.8	17.6	13.7	3.9	31.4			
FORESTRY PRODUCTION AND PROCESSING	#	4	1	1	0	0	0	1	1	0	0
	%		25.0	25.0	.0	.0	.0	25.0	25.0	.0	.0
	%	3	33.3	33.3	.0	.0	.0	33.3			
FORESTRY AND RELATED SCIENCES	#	30	6	5	6	3	0	7	2	0	1
	%		20.0	16.7	20.0	10.0	.0	23.3	6.7	.0	3.3
	%	27	22.2	18.5	22.2	11.1	.0	25.9			
WILDLIFE MANAGEMENT	#	3	1	0	0	0	0	1	1	0	0
	%		33.3	.0	.0	.0	.0	33.3	33.3	.0	.0
	%	2	50.0	.0	.0	.0	.0	50.0			
RENEWABLE NATURAL RESOURCES, OTHER	#	12	5	3	1	0	0	1	1	1	0
	%		41.7	25.0	8.3	.0	.0	8.3	8.3	8.3	.0
	%	10	50.0	30.0	10.0	.0	.0	10.0			
*TOTAL RENEWABLE NATURAL RESOURCES		103	26	13	16	10	2	26	8	1	1
	%		25.2	12.6	15.5	9.7	1.9	25.2	7.8	1.0	1.0
	%	93	28.0	14.0	17.2	10.8	2.2	28.0			

TABLE 2.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALUREATE DEGREE GRADUATES IN AGRICULTURE AND RENEWABLE NATURAL RESOURCES, 1984

	TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TOTAL	493	155	128	52	26	18	54	53	4	3
		31.4	26.0	10.5	5.3	3.7	11.0	10.8	.8	.6
	433	35.8	29.6	12.0	6.0	4.2	12.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

It is apparent that job seeking graduates in specific agricultural sciences suffered some decline in demand in 1984. The Animal Sciences, general agricultural science and the business aspects of agriculture were especially responsible for substantially less employment in 1984 than in 1983.

In terms of the proportion of full-time employed graduates finding employment in Pennsylvania, the following ranking of the degree fields of Table 2.06 resulted.

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	1	Wildlife Management	100.0	NA
2	19	Food Sciences	89.5	53.8
3	14	Agricultural Sciences, General	78.6	68.0
4.5	33	Renewable Natural Resources, General	66.7	70.0
4.5	9	Renewable Natural Resources, Other	66.7	NA
6	20	Agricultural Business and Management	65.0	70.3
7	20	Forestry and Related Sciences	60.0	73.3
-	361	All Agricultural Science and Renewable Natural Resources Graduates	57.3	62.8
8	98	Animal Sciences	55.1	66.7
9	2	Forestry Production and Processing	50.0	33.3
10	136	Plant Sciences	49.3	57.1
11	9	Agricultural Mechanics	33.3	83.3

Results for Bachelor's Degree Graduates in Business, Marketing, and Management

Table 2.07 gives a more detailed breakout of the business-oriented degree fields of Table 2.0. The degree fields of Table 2.07, when ranked according to the rate of full-time, degree-related, Civilian Labor Market employment, appear as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2	1	Accounting, Bookkeeping and Related Programs	100.0	81.8
2	2	Personnel Management	100.0	100.0
2	2	Small Business Management and Ownership	100.0	100.0
4	64	Apparel and Accessories Marketing	96.9	57.0
5	28	Business and Management, Other	85.7	72.5
6	12	Secretarial and Related Programs	83.3	71.4
7	187	Institutional Management	82.9	64.6
8	47	Office Supervision and Management	80.9	48.4
9	32	Food Marketing	78.1	70.4
10	1,987	Accounting	77.4	66.9
11	1,486	Business Administration and Management	75.4	68.0

TABLE 2.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BUSINESS AND MANAGEMENT											
BUSINESS AND MANAGEMENT, GENERAL											
	#	954	373	160	96	59	41	100	108	7	10
	%		39.1	16.8	10.1	6.2	4.3	10.5	11.3	.7	1.0
	%	829	45.0	19.3	11.6	7.1	4.9	12.1			
ACCOUNTING											
	#	2,128	1,022	517	120	19	61	248	90	13	38
	%		48.0	24.3	5.6	.9	2.9	11.7	4.2	.6	1.8
	%	1,987	51.4	26.0	6.0	1.0	3.1	12.5			
BANKING AND FINANCE											
	#	529	163	113	47	19	31	104	36	5	11
	%		30.8	21.4	8.9	3.6	5.9	19.7	6.8	.9	2.1
	%	477	34.2	23.7	9.9	4.0	6.5	21.8			
BUSINESS ADMINISTRATION AND MANAGEMENT											
	#	1,652	750	372	86	47	48	185	98	27	39
	%		45.4	22.5	5.2	2.8	2.9	11.2	5.9	1.6	2.4
	%	1,488	50.4	25.0	5.8	3.2	3.2	12.4			
BUSINESS ECONOMICS											
	#	87	25	18	7	3	3	16	14	0	1
	%		28.7	20.7	8.0	3.4	3.4	18.4	16.1	.0	1.1
	%	72	34.7	25.0	9.7	4.2	4.2	22.2			
HUMAN RESOURCES DEVELOPMENT											
	#	15	5	0	0	0	1	4	1	0	4
	%		33.3	.0	.0	.0	6.7	26.7	6.7	.0	26.7
	%	10	50.0	.0	.0	.0	10.0	40.0			
INSTITUTIONAL MANAGEMENT											
	#	196	61	94	11	4	3	14	7	0	2
	%		31.1	48.0	5.6	2.0	1.5	7.1	3.6	.0	1.0
	%	187	32.6	50.3	5.9	2.1	1.6	7.5			

TABLE 2.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BUSINESS AND MANAGEMENT											
INSURANCE AND RISK MANAGEMENT	#	15	6	4	1	0	1	2	1	0	0
	%		40.0	26.7	6.7	.0	6.7	13.3	6.7	.0	.0
	%	14	42.9	28.6	7.1	.0	7.1	14.3			
INTERNATIONAL BUSINESS MANAGEMENT	#	10	3	2	1	1	0	2	1	0	0
	%		30.0	20.0	10.0	10.0	.0	20.0	10.0	.0	.0
	%	9	33.3	22.2	11.1	11.1	.0	22.2			
LABOR/INDUSTRIAL RELATIONS	#	29	6	3	6	1	3	1	8	1	0
	%		20.7	10.3	20.7	3.4	10.3	3.4	27.6	3.4	.0
	%	20	30.0	15.0	30.0	5.0	15.0	5.0			
MANAGEMENT INFORMATION SYSTEMS	#	148	69	34	11	2	2	23	4	0	3
	%		46.6	23.0	7.4	1.4	1.4	15.5	2.7	.0	2.0
	%	141	48.9	24.1	7.8	1.4	1.4	16.3			
MANAGEMENT SCIENCE	#	60	14	12	2	0	1	23	3	4	1
	%		23.3	20.0	3.3	.0	1.7	38.3	5.0	6.7	1.7
	%	52	26.9	23.1	3.8	.0	1.9	44.2			
MARKETING MANAGEMENT AND RESEARCH	#	769	374	141	37	27	23	96	27	4	40
	%		48.6	18.3	4.8	3.5	3.0	12.5	3.5	.5	5.2
	%	698	53.6	20.2	5.3	3.9	3.3	13.8			
PERSONNEL MANAGEMENT	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			

TABLE 2.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UNEMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BUSINESS AND MANAGEMENT											
REAL ESTATE											
	#	9	5	0	1	0	0	1	1	0	1
	%		55.6	.0	11.1	.0	.0	11.1	11.1	.0	11.1
	%	7	71.4	.0	14.3	.0	.0	14.3			
SMALL BUSINESS MANAGEMENT AND OWNERSHIP											
	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
BUSINESS AND MANAGEMENT, OTHER											
	#	30	22	2	2	0	0	2	2	0	0
	%		73.3	6.7	6.7	.0	.0	6.7	6.7	.0	.0
	%	28	78.6	7.1	7.1	.0	.0	7.1			
***TOTAL BUSINESS AND MANAGEMENT**											
		6,635	2,902	1,472	428	182	218	821	401	61	150
			43.7	22.2	6.5	2.7	3.3	12.4	6.0	.9	2.3
		6,023	48.2	24.4	7.1	3.0	3.6	13.6			
BUSINESS AND OFFICE											
ACCOUNTING, BOOKKEEPING, AND RELATED PROGRAMS											
	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
BUSINESS DATA PROCESSING AND RELATED PROGRAMS											
	#	76	43	9	0	0	0	24	0	0	0
	%		56.6	11.8	.0	.0	.0	31.6	.0	.0	.0
	%	76	56.6	11.8	.0	.0	.0	31.6			
OFFICE SUPERVISION AND MANAGEMENT											
	#	48	32	6	4	1	1	3	0	1	0
	%		66.7	12.5	8.3	2.1	2.1	6.3	.0	2.1	.0
	%	47	68.1	12.8	8.5	2.1	2.1	6.4			

TABLE 2.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BUSINESS AND OFFICE											
SECRETARIAL AND RELATED PROGRAMS	#	12	7	3	1	0	1	0	0	0	0
	%		58.3	25.0	8.3	.0	8.3	.0	.0	.0	.0
	%	12	58.3	25.0	8.3	.0	8.3	.0			
BUSINESS AND OFFICE, OTHER	#	12	4	2	0	0	4	1	1	0	0
	%		33.3	16.7	.0	.0	33.3	8.3	8.3	.0	.0
	%	11	36.4	18.2	.0	.0	36.4	9.1			
*TOTAL BUSINESS AND OFFICE		149	87	20	5	1	6	28	1	1	0
			58.4	13.4	3.4	.7	4.0	18.8	.7	.7	.0
		147	59.2	13.6	3.4	.7	4.1	19.0			
MARKETING AND DISTRIBUTION											
APPAREL AND ACCESSORIES MARKETING	#	74	58	4	0	0	2	0	0	0	10
	%		78.4	5.4	.0	.0	2.7	.0	.0	.0	13.5
	%	64	90.6	6.3	.0	.0	3.1	.0			
BUSINESS AND PERSONAL SERVICES MARKETING	#	40	6	12	1	0	1	18	1	1	0
	%		15.0	30.0	2.5	.0	2.5	45.0	2.5	2.5	.0
	%	38	15.8	31.6	2.6	.0	2.6	47.4			
FOOD MARKETING	#	35	25	0	0	0	0	7	2	0	1
	%		71.4	.0	.0	.0	.0	20.0	5.7	.0	2.9
	%	32	78.1	.0	.0	.0	.0	21.9			
GENERAL MARKETING	#	237	73	33	22	5	20	61	13	3	7
	%		30.8	13.9	9.3	2.1	8.4	25.7	5.5	1.3	3.0
	%	214	34.1	15.4	10.3	2.3	9.3	28.5			

TABLE 2.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

	TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
*TOTAL MARKETING AND DISTRIBUTION										
	386	162	49	23	5	23	86	16	4	18
		42.0	12.7	6.0	1.3	6.0	22.3	4.1	1.0	4.7
	348	46.6	14.1	6.6	1.4	6.6	24.7			
TOTAL										
	7,170	3,151	1,541	456	188	247	935	418	66	168
		43.9	21.5	6.4	2.6	3.4	13.0	5.8	.9	2.3
	6,518	48.3	23.6	7.0	2.9	3.8	14.3			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

12	698	Marketing Management and Research	73.8	68.7
13	141	Management Information Systems	73.0	70.2
-	6,518	All Business, Marketing, and Management Graduates	71.9	65.1
14.5	14	Insurance and Risk Management	71.5	84.2
14.5	7	Real Estate	71.4	58.4
16	76	Business Data Processing and Related Programs	68.4	90.9
17	829	Business and Management, General	64.3	64.1
18	72	Business Economics	59.7	44.8
19	477	Banking and Finance	57.9	49.8
20	9	International Business Management	55.5	100.0
21	11	Business and Office, Other	54.6	NA
22.5	10	Human Resources Development	50.0	NA
22.5	52	Management Science	50.0	56.4
24	214	General Marketing	49.5	47.8
25	38	Business and Personal Services Marketing	47.4	73.4
26	20	Labor/Industrial Relations	45.0	25.0

In terms of the proportion of full-time employed graduates finding full-time employment in Pennsylvania, the degree fields of Table 2.07 were ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
3.5	1	Accounting, Bookkeeping and Related Programs	100.0	88.9
3.5	25	Food Marketing	100.0	100.0
3.5	5	Human Resources Development	100.0	NA
3.5	2	Personnel Management	100.0	50.0
3.5	6	Real Estate	100.0	70.0
3.5	2	Small Business Management and Ownership	100.0	83.3
7	62	Apparel and Accessories Marketing	93.5	54.9
8	26	Business and Management, Other	92.3	61.3
9	43	Office Supervision and Management	83.7	91.3
10	52	Business Data Processing and Related Programs	82.7	72.7
11	16	Labor/Industrial Relations	75.0	78.6
12	11	Secretarial and Related Programs	72.7	89.5
13	133	General Marketing	71.4	84.1
14	579	Marketing Management and Research	71.0	65.1
15	116	Management Information Systems	69.0	59.4
16	688	Business and Management, General	68.2	60.4
17	1,678	Accounting	68.1	71.6
-	5,336	All Business, Marketing, and Management Graduates	67.6	68.1

18	6	Business and Office, Other	66.7	NA
19	1,255	Business Administration and Management	66.6	73.1
20	11	Insurance and Risk Management	63.6	61.1
21	342	Banking and Finance	61.4	63.9
22	53	Business Economics	60.4	65.1
23.5	7	International Business Management	57.1	50.0
23.5	28	Management Science	57.1	68.0
25	170	Institutional Management	42.4	50.6
26	19	Business and Perosnal Services Marketing	36.8	51.8

It can be seen in the above two rankings that the 1984 graduates in business oriented programs were (1) more successful in finding degree-related full time employment upon entry into the labor market and (2) just as likely to hold a full time job in Pennsylvania as they were in 1983.

Results for Bachelor's Degree Graduates in Education

Table 2.08 gives a detailed breakout of significant degree fields for Pennsylvania's reported baccalaureate degree graduates in Education. As before, there are many possible analyses of these data that could be made but this report will look only at the full-time, degree-related employment of graduates in the Civilian Labor Market and the proportion of full-time employed graduates who found full-time employment in Pennsylvania.

When the degree fields of Table 2.08 are ranked according to their rate of full-time, degree-related, Civilian Labor Market employment, the results are as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
3.5	1	Bilingual/Bicultural Education	100.0	NA
3.5	2	Dental Hygiene Education	100.0	100.0
3.5	13	Education of the Visually Handicapped	100.0	78.9
3.5	1	Evaluation and Research	100.0	NA
3.5	2	Nursing Education	100.0	96.1
3.5	2	Specific Learning Disabilities	100.0	NA
7.5	14	Education of the Mentally Handicapped	85.7	75.0
7.5	7	Education of the Physically Handicapped	85.7	72.8
9	47	Education of the Multiple Handicapped	83.0	73.9
10	41	Mathematics Education	82.9	82.7
11	348	Special Education, General	81.6	68.2
12	81	Industrial Arts Education	80.2	72.3
13	23	Pre-Elementary Education	78.3	56.3
14	4	Agricultural Education	75.0	52.6
15	34	Secondary Education	73.5	70.0
16	89	Special Education, Other	71.9	69.5
17	21	Science Education	71.4	73.7

TABLE 2.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
EDUCATION, GENERAL											
EDUCATION, GENERAL	#	51	25	5	5	0	3	7	3	1	2
	%		49.0	9.8	9.8	.0	5.9	13.7	5.9	2.0	3.9
	%	45	55.6	11.1	11.1	.0	6.7	15.6			
*TOTAL EDUCATION, GENERAL		51	25	5	5	0	3	7	3	1	2
			49.0	9.8	9.8	.0	5.9	13.7	5.9	2.0	3.9
		45	55.6	11.1	11.1	.0	6.7	15.6			
BILINGUAL/BICULTURAL EDUCATION											
BILINGUAL/CROSSCULTURAL EDUCATION	#	2	0	1	0	0	0	0	1	0	0
	%		.0	50.0	.0	.0	.0	.0	50.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
*TOTAL BILINGUAL/BICULTURAL EDUCATION		2	0	1	0	0	0	0	1	0	0
			.0	50.0	.0	.0	.0	.0	50.0	.0	.0
		1	.0	100.0	.0	.0	.0	.0			
EDUCATION ADMINISTRATION											
	#	38	9	0	4	0	5	8	7	0	5
	%		23.7	.0	10.5	.0	13.2	21.1	18.4	.0	13.2
	%	26	34.6		15.4	.0	19.2	30.8			
*TOTAL EDUCATION ADMINISTRATION		38	9	0	4	0	5	8	7	0	5
			23.7	.0	10.5	.0	13.2	21.1	18.4	.0	13.2
		26	34.6		15.4	.0	19.2	30.8			

TABLE 2.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
EVALUATION AND RESEARCH											
	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
*TOTAL EVALUATION AND RESEARCH											
		1	0	1	0	0	0	0	0	0	0
			.0	100.0	.0	.0	.0	.0	.0	.0	.0
		1	.0	100.0	.0	.0	.0	.0			
SPECIAL EDUCATION											
SPECIAL EDUCATION, GENERAL											
	#	382	191	93	21	4	13	26	30	2	2
	%		50.0	24.3	5.5	1.0	3.4	6.8	7.9	.5	.5
	%	348	54.9	26.7	6.0	1.1	3.7	7.5			
EDUCATION OF THE DEAF AND HEARING IMPAIRED											
	#	11	1	5	2	0	0	1	2	0	0
	%		9.1	45.5	18.2	.0	.0	9.1	18.2	.0	.0
	%	9	11.1	55.6	22.2	.0	.0	11.1			
EDUCATION OF THE MENTALLY HANDICAPPED											
	#	15	4	8	0	0	0	2	1	0	0
	%		26.7	53.3	.0	.0	.0	13.3	6.7	.0	.0
	%	14	28.6	57.1	.0	.0	.0	14.3			
EDUCATION OF THE MULTIPLE HANDICAPPED											
	#	51	33	6	1	1	6	0	3	1	0
	%		64.7	11.8	2.0	2.0	11.8	.0	5.9	2.0	.0
	%	47	70.2	12.8	2.1	2.1	12.8	.0			
EDUCATION OF THE PHYSICALLY HANDICAPPED											
	#	8	5	1	0	0	0	1	1	0	0
	%		62.5	12.5	.0	.0	.0	12.5	12.5	.0	.0
	%	7	71.4	14.3	.0	.0	.0	14.3			

TABLE 2.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
SPECIAL EDUCATION											
EDUCATION OF THE VISUALLY HANDICAPPED	#	13	4	9	0	0	0	0	0	0	0
	%		30.8	69.2	.0	.0	.0	.0	.0	.0	.0
	%	13	30.8	69.2	.0	.0	.0	.0			
SPECIFIC LEARNING DISABILITIES	#	6	0	2	0	0	0	0	4	0	0
	%		.0	33.3	.0	.0	.0	.0	66.7	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
SPEECH CORRECTION	#	116	11	18	16	0	1	5	63	0	2
	%		9.5	15.5	13.8	.0	.9	4.3	54.3	.0	1.7
	%	51	21.6	35.3	31.4	.0	2.0	9.8			
SPECIAL EDUCATION, OTHER	#	107	24	40	7	1	12	5	11	0	7
	%		22.4	37.4	6.5	.9	11.2	4.7	10.3	.0	6.5
	%	89	27.0	44.9	7.9	1.1	13.5	5.6			
*TOTAL SPECIAL EDUCATION		709	273	182	47	6	32	40	115	3	11
			38.5	25.7	6.6	.8	4.5	5.6	16.2	.4	1.6
		580	47.1	31.4	8.1	1.0	5.5	6.9			
TEACHER EDUCATION, GENERAL PROGRAMS											
ELEMENTARY EDUCATION	#	1,078	411	181	117	20	168	109	44	4	24
	%		38.1	16.8	10.9	1.9	15.6	10.1	4.1	.4	2.2
	%	1,006	40.9	18.0	11.6	2.0	16.7	10.8			
PRE-ELEMENTARY EDUCATION	#	25	14	4	4	0	1	0	2	0	0
	%		56.0	16.0	16.0	.0	4.0	.0	8.0	.0	.0
	%	23	60.9	17.4	17.4	.0	4.3	.0			

TABLE 2.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TEACHER EDUCATION, GENERAL PROGRAMS											
SECONDARY EDUCATION	#	40	20	5	3	4	1	1	5	1	0
	%		50.0	12.5	7.5	10.0	2.5	2.5	12.5	2.5	.0
	%	34	58.8	14.7	8.8	11.8	2.9	2.9			
EARLY CHILDHOOD EDUCATION	#	169	67	29	9	5	26	23	7	0	3
	%		39.6	17.2	5.3	3.0	15.4	13.6	4.1	.0	1.8
	%	159	42.1	18.2	5.7	3.1	16.4	14.5			
TEACHER EDUCATION, GENERAL PROGRAMS, OTHER	#	3	0	0	0	0	0	0	3	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0		.0	.0	.0	.0			
*TOTAL TEACHER EDUCATION, GENERAL PROGRAMS		1,315	512	219	133	29	196	133	61	5	27
			38.9	16.7	10.1	2.2	14.9	10.1	4.6	.4	2.1
		1,222	41.9	17.9	10.9	2.4	16.0	10.9			
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
AGRICULTURAL EDUCATION	#	4	3	0	0	1	0	0	0	0	0
	%		75.0	.0	.0	25.0	.0	.0	.0	.0	.0
	%	4	75.0		.0	25.0	.0	.0			
ART EDUCATION	#	98	28	11	12	3	24	12	7	0	1
	%		28.6	11.2	12.2	3.1	24.5	12.2	7.1	.0	1.0
	%	90	31.1	12.2	13.3	3.3	26.7	13.3			
BUSINESS EDUCATION	#	55	23	11	6	1	7	5	1	0	1
	%		41.8	20.0	10.9	1.8	12.7	9.1	1.8	.0	1.8
	%	53	43.4	20.8	11.3	1.9	13.2	9.4			

TABLE 2.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
ENGLISH EDUCATION	#	57	19	12	7	1	5	4	8	0	1
	%		33.3	21.1	12.3	1.8	8.8	7.0	14.0	.0	1.8
	%	48	39.6	25.0	14.6	2.1	10.4	8.3			
FOREIGN LANGUAGES EDUCATION	#	9	2	3	0	0	1	3	0	0	0
	%		22.2	33.3	.0	.0	11.1	33.3	.0	.0	.0
	%	9	22.2	33.3	.0	.0	11.1	33.3			
HEALTH EDUCATION	#	6	1	0	0	1	2	0	2	0	0
	%		16.7	.0	.0	16.7	33.3	.0	33.3	.0	.0
	%	4	25.0		.0	25.0	50.0	.0			
HOME ECONOMICS EDUCATION	#	22	10	2	4	3	2	1	0	0	0
	%		45.5	9.1	18.2	13.6	9.1	4.5	.0	.0	.0
	%	22	45.5	9.1	18.2	13.6	9.1	4.5			
INDUSTRIAL ARTS EDUCATION	#	86	47	18	8	1	1	6	4	1	0
	%		54.7	20.9	9.3	1.2	1.2	7.0	4.7	1.2	.0
	%	81	58.0	22.2	9.9	1.2	1.2	7.4			
MARKETING AND DISTRIBUTIVE EDUCATION	#	7	2	2	3	0	0	0	0	0	0
	%		28.6	28.6	42.9	.0	.0	.0	.0	.0	.0
	%	7	28.6	28.6	42.9	.0	.0	.0			
MATHEMATICS EDUCATION	#	43	26	8	1	0	3	3	1	1	0
	%		60.5	18.6	2.3	.0	7.0	7.0	2.3	2.3	.0
	%	41	63.4	19.5	2.4	.0	7.3	7.3			

TABLE 2.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
MUSIC EDUCATION	#	183	55	28	16	2	26	22	24	2	8
	%		30.1	15.3	8.7	1.1	14.2	12.0	13.1	1.1	4.4
	%	149	36.9	18.8	10.7	1.3	17.4	14.8			
PHYSICAL EDUCATION	#	251	53	41	25	11	52	21	32	2	14
	%		21.1	16.3	10.0	4.4	20.7	8.4	12.7	.8	5.6
	%	203	26.1	20.2	12.3	5.4	25.6	10.3			
SCIENCE EDUCATION	#	23	10	5	1	1	1	3	1	0	1
	%		43.5	21.7	4.3	4.3	4.3	13.0	4.3	.0	4.3
	%	21	47.6	23.8	4.8	4.8	4.8	14.3			
SOCIAL SCIENCE EDUCATION	#	6	0	0	0	0	0	0	4	0	2
	%		.0	.0	.0	.0	.0	.0	66.7	.0	33.3
	%	0	.0		.0	.0	.0	.0			
SOCIAL STUDIES EDUCATION	#	78	15	15	11	2	11	14	6	1	3
	%		19.2	19.2	14.1	2.6	14.1	17.9	7.7	1.3	3.8
	%	68	22.1	22.1	16.2	2.9	16.2	20.6			
TRADE AND INDUSTRIAL EDUCATION	#	14	7	0	4	1	0	1	0	0	1
	%		50.0	.0	28.6	7.1	.0	7.1	.0	.0	7.1
	%	13	53.8		30.8	7.7	.0	7.7			
NURSING EDUCATION	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0		.0	.0	.0	.0			

TABLE 2.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
DENTAL HYGIENE											
	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0		.0	.0	.0	.0			
ENVIRONMENTAL EDUCATION											
	#	1	0	0	0	0	0	1	0	0	0
	%		.0	.0	.0	.0	.0	100.0	.0	.0	.0
	%	1	.0		.0	.0	.0	100.0			
HEALTH, PHYSICAL & RECREATION EDUCATION											
	#	79	14	6	9	0	17	24	7	1	1
	%		17.7	7.6	11.4	.0	21.5	30.4	8.9	1.3	1.3
	%	70	20.0	8.6	12.9	.0	24.3	34.3			
PHYSICAL EDUCATION AND SPORT											
	#	2	0	0	2	0	0	0	0	0	0
	%		.0	.0	100.0	.0	.0	.0	.0	.0	.0
	%	2	.0		100.0	.0	.0	.0			
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS, OTHER											
	#	2	1	0	0	0	0	0	1	0	0
	%		50.0	.0	.0	.0	.0	.0	50.0	.0	.0
	%	1	100.0		.0	.0	.0	.0			
*TOTAL TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
		1,030	320	162	109	28	152	120	98	8	33
			31.1	15.7	10.6	2.7	14.8	11.7	9.5	.8	3.2
		891	35.9	18.2	12.2	3.1	17.1	13.5			
EDUCATION, OTHER											
EDUCATION, OTHER											
	#	61	22	8	6	1	8	3	11	0	2
	%		36.1	13.1	9.8	1.6	13.1	4.9	18.0	.0	3.3
	%	48	45.8	16.7	12.5	2.1	16.7	6.3			

TABLE 2.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN EDUCATION, 1984

	TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
*TOTAL EDUCATION, OTHER	61	22	8	6	1	8	3	11	0	2
		36.1	13.1	9.8	1.6	13.1	4.9	18.0	.0	3.3
	48	45.8	16.7	12.5	2.1	16.7	6.3			
TOTAL	3,207	1,161	578	304	64	396	311	296	17	80
		36.2	18.0	9.5	2.0	12.3	9.7	9.2	.5	2.5
	2,814	41.3	20.5	10.8	2.3	14.1	11.1			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

18.5	9	Education of the Deaf and Hearing Impaired	66.7	77.8
18.5	45	Education, General	66.7	42.4
20	48	English Education	64.6	48.4
21	53	Business Education	64.2	51.6
22	48	Education, Other	62.5	73.9
-	2,814	All Education Graduates	61.8	56.2
23	159	Early Childhood Education	60.3	59.8
24	1,006	Elementary Education	58.8	52.7
25	7	Marketing and Distributive Education	57.2	40.0
26	51	Speech Correction	56.9	57.1
27	149	Music Education	55.7	57.3
28	9	Foreign Languages Education	55.5	30.0
29	22	Home Economics Education	54.6	72.8
30	13	Trade and Industrial Education	53.8	100.0
31	203	Physical Education	46.3	30.1
32	68	Social Studies Education	44.2	29.5
33	90	Art Education	43.3	39.8
34	26	Education Administration	34.6	NA
35	70	Health, Physical, and Recreational Education	28.6	39.7
36	4	Health Education	25.0	60.0
38	1	Environmental Education	0.0	0.0
38	2	Physical Education and Sports Education	0.0	0.0
38	1	Teacher Education, Specific Subject Areas, Other	0.0	NA

In terms of the proportion of full-time employed baccalaureate graduates who obtained full-time employment in Pennsylvania, the degree fields of Table 2.08 were ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
3	2	Dental Hygiene Education	100.0	100.0
3	13	Education Administration	100.0	NA
3	2	Nursing Education	100.0	88.3
3	2	Teacher Education, Specific Subject Areas, Other	100.0	NA
3	2	Physical Education and Sports Education	100.0	100.0
4	12	Trade and Industrial Education	91.7	100.0
5	35	Education, General	85.7	75.9
6	6	Education of the Physically Handicapped	83.3	62.5
7	41	Education of the Multiple Handicapped	82.9	74.4
8	22	Pre-Elementary Education	81.8	83.3
9	29	Health, Physical, and Recreational Education	79.3	47.1
10	35	Mathematics Education	77.1	65.4

11	37	Education, Other	75.7	86.1
12	4	Agricultural Education	75.0	73.3
13	74	Industrial Arts Education	74.3	79.1
14	54	Art Education	74.1	80.3
15	19	Home Economics Education	73.7	68.4
16	729	Elementary Education	72.4	71.4
17	32	Secondary Education	71.9	78.6
18	7	Marketing and Distributive Education	71.4	80.0
19	41	Business Education	70.7	85.2
20	101	Music Education	70.3	66.3
-	2,107	All Education Graduates	69.5	68.6
21	110	Early Childhood Education	69.1	69.9
22	309	Special Education, General	68.6	59.9
23	39	English Education	66.7	61.9
24	17	Science Education	64.7	62.5
25	43	Social Studies Education	60.5	70.0
26.5	130	Physical Education	60.0	61.2
26.5	45	Speech Correction	60.0	44.7
28	2	Health Education	50.0	75.0
29	72	Special Education, Other	43.1	78.2
30	5	Foreign Languages Education	40.0	71.4
31	8	Education of the Deaf and Hearing Impaired	37.5	25.0
32	12	Education of the Mentally Handicapped	33.3	37.0
33	13	Education of the Visually Handicapped	30.8	31.3
35	1	Bilingual/Bicultural Education	0.0	NA
35	1	Evaluation and Research	0.0	NA
35	2	Specific Learning Disabilities	0.0	NA

Examination of the above two tables suggests that several conclusions can be drawn. For example, the graduate in Special Education tends to find degree-related employment, but not necessarily in Pennsylvania. Also, graduates with degrees in Physics and Mathematics Education are readily able to find degree-related employment in Pennsylvania. Graduates in Nursing Education have little difficulty finding degree-related employment in Pennsylvania. This confirms the general opinion that nurse educators are in short supply in Pennsylvania as well as nationally. Care must be exercised in interpreting these rankings, or any of the other rankings in this report, since the very high or very low ranked degree fields may have had few reported graduates.

Results for Bachelor's Degree Graduates in Engineering

Table 2.09 gives a detailed degree field breakout of the major discipline of Engineering that is found in Table 2.0.

When the Engineering degree fields of Table 2.09 were compared with regard to the proportion of engineering graduates in the Civilian Labor Market who found degree-related employment, the following rank order listing resulted:

TABLE 2.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN ENGINEERING, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
ENGINEERING, GENERAL	#	62	8	10	0	1	0	16	17	10	0
	%		12.9	16.1	.0	1.6	.0	25.8	27.4	16.1	.0
	%	35	22.9	28.6	.0	2.9	.0	45.7			
AEROSPACE, AERONAUTICAL, AND ASTRONAUTICAL ENGINEERING	#	53	6	25	1	3	0	3	3	12	0
	%		11.3	47.2	1.9	5.7	.0	5.7	5.7	22.6	.0
	%	38	15.8	65.8	2.6	7.9	.0	7.9			
AGRICULTURAL ENGINEERING	#	16	3	3	3	1	0	2	4	0	0
	%		18.8	18.8	18.8	6.3	.0	12.5	25.0	.0	.0
	%	12	25.0	25.0	25.0	8.3	.0	16.7			
ARCHITECTURAL ENGINEERING	#	51	10	31	1	1	0	4	2	2	0
	%		19.6	60.8	2.0	2.0	.0	7.8	3.9	3.9	.0
	%	47	21.3	66.0	2.1	2.1	.0	8.5			
BIOENGINEERING AND BIOMEDICAL ENGINEERING	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
CERAMIC ENGINEERING	#	15	5	7	0	0	0	1	2	0	0
	%		33.3	46.7	.0	.0	.0	6.7	13.3	.0	.0
	%	13	38.5	53.8	.0	.0	.0	7.7			
CHEMICAL ENGINEERING	#	319	79	96	11	8	1	73	40	11	0
	%		24.8	30.1	3.4	2.5	.3	22.9	12.5	3.4	.0
	%	268	29.5	35.8	4.1	3.0	.4	27.2			
CIVIL ENGINEERING	#	188	44	82	6	5	3	21	21	5	1
	%		23.4	43.6	3.2	2.7	1.6	11.2	11.2	2.7	.5
	%	161	27.3	50.9	3.7	3.1	1.9	13.0			

TABLE 2.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN ENGINEERING, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
COMPUTER ENGINEERING											
	#	42	7	22	0	0	0	8	2	3	0
	%		16.7	52.4	.0	.0	.0	19.0	4.8	7.1	.0
	%	37	18.9	59.5	.0	.0	.0	21.6			
ELECTRICAL, ELECTRONICS, AND COMMUNICATIONS ENGINEERING											
	#	544	121	323	7	3	1	26	41	20	2
	%		22.2	59.4	1.3	.6	.2	4.8	7.5	3.7	.4
	%	481	25.2	67.2	1.5	.6	.2	5.4			
ENGINEERING PHYSICS											
	#	10	2	4	0	0	0	2	0	2	0
	%		20.0	40.0	.0	.0	.0	20.0	.0	20.0	.0
	%	8	25.0	50.0	.0	.0	.0	25.0			
ENGINEERING SCIENCE											
	#	43	11	24	0	0	0	2	4	2	0
	%		25.6	55.8	.0	.0	.0	4.7	9.3	4.7	.0
	%	37	29.7	64.9	.0	.0	.0	5.4			
ENVIRONMENTAL HEALTH ENGINEERING											
	#	13	4	5	2	0	0	1	1	0	0
	%		30.8	38.5	15.4	.0	.0	7.7	7.7	.0	.0
	%	12	33.3	41.7	16.7	.0	.0	8.3			
INDUSTRIAL ENGINEERING											
	#	171	40	82	4	4	1	29	6	5	0
	%		23.4	48.0	2.3	2.3	.6	17.0	3.5	2.9	.0
	%	160	25.0	51.2	2.5	2.5	.6	18.1			
MATERIALS ENGINEERING											
	#	11	3	2	0	0	0	3	2	1	0
	%		27.3	18.2	.0	.0	.0	27.3	18.2	9.1	.0
	%	8	37.5	25.0	.0	.0	.0	37.5			
MECHANICAL ENGINEERING											
	#	511	144	241	12	3	3	58	33	17	0
	%		28.2	47.2	2.3	.6	.6	11.4	6.5	3.3	.0
	%	461	31.2	52.3	2.6	.7	.7	12.6			

TABLE 2.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN ENGINEERING, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
METALLURGICAL ENGINEERING	#	70	15	39	1	2	0	3	8	2	0
	%		21.4	55.7	1.4	2.9	.0	4.3	11.4	2.9	.0
	%	60	25.0	65.0	1.7	3.3	.0	5.0			
MINING AND MINERAL ENGINEERING	#	29	5	2	7	2	0	12	1	0	0
	%		17.2	6.9	24.1	6.9	.0	41.4	3.4	.0	.0
	%	28	17.9	7.1	25.0	7.1	.0	42.9			
NUCLEAR ENGINEERING	#	28	10	10	1	0	0	3	2	2	0
	%		35.7	35.7	3.6	.0	.0	10.7	7.1	7.1	.0
	%	24	41.7	41.7	4.2	.0	.0	12.5			
OCEAN ENGINEERING	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
PETROLEUM ENGINEERING	#	73	5	27	8	8	1	20	3	1	0
	%		6.8	37.0	11.0	11.0	1.4	27.4	4.1	1.4	.0
	%	69	7.2	39.1	11.6	11.6	1.4	29.0			
TEXTILE ENGINEERING	#	27	10	13	0	0	0	0	4	0	0
	%		37.0	48.1	.0	.0	.0	.0	14.8	.0	.0
	%	23	43.5	56.5	.0	.0	.0	.0			
ENGINEERING, OTHER	#	30	9	6	2	3	0	5	4	1	0
	%		30.0	20.0	6.7	10.0	.0	16.7	13.3	3.3	.0
	%	25	36.0	24.0	8.0	12.0	.0	20.0			
TOTAL		2,309	543	1,054	66	44	10	292	201	96	3
			23.5	45.6	2.9	1.9	.4	12.6	8.7	4.2	.1
		2,009	27.0	52.5	3.3	2.2	.5	14.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	2	Bioengineering and Biomedical Engineering	100.0	NA
1.5	23	Textile Engineering	100.0	100.0
3	37	Engineering Science	94.6	71.4
4.5	13	Ceramic Engineering	92.3	50.0
4.5	481	Electrical, Electronic and Communications Engineering	92.4	92.6
6	60	Metallurgical Engineering	90.0	68.2
7	47	Architectural Engineering	87.3	90.0
8	461	Mechanical Engineering	83.5	73.6
9	24	Nuclear Engineering	83.4	86.6
10	38	Aerospace, Aeronautical, and Astronautical Engineering	81.6	68.8
-	2,009	All Engineering Graduates	79.5	71.5
11	37	Computer Engineering	78.4	NA
12	161	Civil Engineering	78.2	77.0
13	160	Industrial Engineering	76.2	58.0
14.5	8	Engineering Physics	75.0	100.0
14.5	12	Environmental Health Engineering	75.0	41.7
16	268	Chemical Engineering	65.3	55.3
17	8	Materials Engineering	62.5	50.0
18	25	Engineering, Other	60.0	84.0
19	35	General Engineering	51.5	83.9
20	12	Agricultural Engineering	50.0	14.2
21	69	Petroleum Engineering	46.3	42.6
22	28	Mining and Mineral Engineering	25.0	47.8

Since engineering is a discipline characterized by a national or even international labor market, we can expect to find a relatively low incidence of Pennsylvania employment. As can be seen below, this is indeed the case when we inspect the results of ranking these degree fields according to the proportion of Pennsylvania based employment found among full-time employed graduates in Engineering.

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	2	Bioengineering and Biomedical Engineering	100.0	NA
2	16	Mining and Mineral Engineering	75.0	58.6
3.5	10	Agricultural Engineering	60.0	66.7
3.5	5	Materials Engineering	60.0	33.3
5	20	Engineering, Other	55.0	72.7
6	11	Environmental Health Engineering	54.5	41.7
7	21	Nuclear Engineering	52.4	61.5
8	194	Chemical Engineering	46.4	37.5
9	23	Textile Engineering	43.5	0.0
10	19	General Engineering	42.1	53.2
11	12	Ceramic Engineering	41.7	20.0

12	400	Mechanical Engineering	39.0	74.1
13	137	Civil Engineering	36.5	36.6
-	1,707	All Engineering Graduates	35.7	37.5
14	130	Industrial Engineering	33.8	35.6
15	6	Engineering Physics	33.3	NA
16	35	Engineering Science	31.4	33.3
17	454	Electical, Electronic, and Communications Engineering	28.2	32.1
18	57	Metallurgical Engineering	28.1	39.4
19	48	Petroleum Engineering	27.1	12.5
20	43	Architectural Engineering	25.6	27.8
21	29	Computer Engineering	24.1	NA
22	35	Aerospace, Aeronautical, and Astronautical Engineering	20.0	26.1

It is evident that engineering graduates are responding primarily to national, or even international, labor market demand rather than to local demand and that the demand for engineering rose somewhat in 1984. Some fields, however, still remain in the doldrums, i.e., Mining and Mineral Engineering, Petroleum Engineering, General ENgineering, Materials Engineering, and Chemical Engineering.

Results for Bachelor's Degree Graduates in the Engineering and Engineering-Related Technologies

Table 2.10 presents a detailed breakout of the findings for baccalaureate graduates in the major discipline area (Table 2.0) of Engineering and Engineering-Related Technologies.

When a comparison was made between the degree fields of Table 2.10 with regard to the proportion of graduates in the Civilian Labor Market who have found degree-related, full-time employment, the results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	19	Engineering and Engineering Related Technologies, Other	94.8	76.0
2	53	Electrical and Electronics Technologies	86.8	79.0
3	7	Electanechanical Instrumentation and Maintenance Technology	85.7	NA
4	37	Quality Control and Safety Technologies	83.7	51.1
-	234	All Engineering and Engineering-Related Technologies	83.3	68.5
5	67	Industrial Production Technologies	82.1	73.4
6	44	Mechanical and Related Technologies	77.3	63.9
7	7	Environmental Control Technologies	71.5	60.0

TABLE 2.10

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN THE ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
ELECTRICAL AND ELECTRONIC TECHNOLOGIES											
	#	53	26	20	1	0	0	6	0	0	0
	%		49.1	37.7	1.9	.0	.0	11.3	.0	.0	.0
	%	53	49.1	37.7	1.9	.0	.0	11.3			
ELECTROMECHANICAL INSTRUMENTATION AND MAINTENANCE TECHNOLOGY											
	#	10	6	0	0	0	0	1	2	1	0
	%		60.0	.0	.0	.0	.0	10.0	20.0	10.0	.0
	%	7	85.7	.0	.0	.0	.0	14.3			
ENVIRONMENTAL CONTROL TECHNOLOGIES											
	#	7	2	3	0	1	0	1	0	0	0
	%		28.6	42.9	.0	14.3	.0	14.3	.0	.0	.0
	%	7	28.6	42.9	.0	14.3	.0	14.3			
INDUSTRIAL PRODUCTION TECHNOLOGIES											
	#	73	23	32	2	0	2	8	6	0	0
	%		31.5	43.8	2.7	.0	2.7	11.0	8.2	.0	.0
	%	67	34.3	47.8	3.0	.0	3.0	11.9			
QUALITY CONTROL AND SAFETY TECHNOLOGIES											
	#	40	15	16	1	0	1	4	2	1	0
	%		37.5	40.0	2.5	.0	2.5	10.0	5.0	2.5	.0
	%	37	40.5	43.2	2.7	.0	2.7	10.8			
MECHANICAL AND RELATED TECHNOLOGIES											
	#	44	27	7	2	0	0	8	0	0	0
	%		61.4	15.9	4.5	.0	.0	18.2	.0	.0	.0
	%	44	61.4	15.9	4.5	.0	.0	18.2			
ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES, OTHER											
	#	19	14	4	1	0	0	0	0	0	0
	%		73.7	21.1	5.3	.0	.0	.0	.0	.0	.0
	%	19	73.7	21.1	5.3	.0	.0	.0			
TOTAL											
		246	113	82	7	1	3	28	10	2	0
			45.9	33.3	2.8	.4	1.2	11.4	4.1	.8	.0
		234	48.3	35.0	3.0	.4	1.3	12.0			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

When the degree fields of Table 2.10 were compared with regard to the proportion of full-time employed graduates finding employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	6	Electromechanical Instrumentation and Maintenance Technology	100.0	NA
2	36	Mechanical and Related Techologies	80.5	57.6
3	19	Engineering and Engineering-Related Technologies, Other	78.9	66.7
-	203	All Engineering and Engineering-Related Technologies Graduates	59.1	58.4
4	47	Electrical and Electronic Technologies	57.4	44.9
5	32	Quality Control and Safety Technologies	50.0	60.9
6	57	Industrial Production Technologies	44.0	70.3
7	6	Environmental Control Technologies	33.3	69.2

In contrast to the findings of Table 2.09 for Engineers, the data in Table 2.10 shows a definite tendency in 1984 for graduates in the engineering and engineering-related technologies to find Pennsylvania based, degree-related employment with the exception of Quality Control and Safety, Industrial Production, and Environmental Control graduates.

Results for Bachelor's Degree Graduates in the Allied Health Professions

Table 2.11 gives detailed information about baccalaureate degree graduates in the disciplines referred to collectively in Table 2.0 as Allied Health Professions. A scanning of Table 2.11 indicates that graduates in this area tend to obtain degree-related employment, with the possible exception of graduates in Nursing-related Services, Other, and graduates in Music Therapy. Some of the Allied Health degree fields had a substantial number of their graduates pursuing an advanced degree, e.g., Diagnostic and Treatment Services, Other; Chemistry Technology; Mental Health/Human Services, Other; Art Therapy, and Music Therapy.

When the Allied Health degree fields of Table 2.11 were compared with regard to the proportion of full-time employed baccalaureate graduates who found degree-related employment in the Civilian Labor Market, the results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
5	2	Community Health Work	100.0	NA
5	4	Habilitative Services	100.0	100.0
5	15	Medical Laboratory Technology	100.0	83.4
5	4	Medical Laboratory Technologies, Other	100.0	NA

TABLE 2.11

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
DENTAL HYGIENE	#	20	10	6	0	0	1	0	3	0	0
	%		50.0	30.0	.0	.0	5.0	.0	15.0	.0	.0
	%	17	58.8	35.3	.0	.0	5.9	.0			
NUCLEAR MEDICAL TECHNOLOGY	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
RADIOLOGIC (MEDICAL) TECHNOLOGY	#	19	9	0	0	0	3	0	7	0	0
	%		47.4	.0	.0	.0	15.8	.0	36.8	.0	.0
	%	12	75.0	.0	.0	.0	25.0	.0			
CYTOTECHNOLOGY	#	12	8	1	1	0	1	0	1	0	0
	%		66.7	8.3	8.3	.0	8.3	.0	8.3	.0	.0
	%	11	72.7	9.1	9.1	.0	9.1	.0			
MEDICAL LABORATORY TECHNOLOGY	#	21	13	2	0	0	0	0	6	0	0
	%		61.9	9.5	.0	.0	.0	.0	28.6	.0	.0
	%	15	86.7	13.3	.0	.0	.0	.0			
MEDICAL TECHNOLOGY	#	136	83	20	2	1	6	14	8	0	2
	%		61.0	14.7	1.5	.7	4.4	10.3	5.9	.0	1.5
	%	126	65.9	15.9	1.6	.8	4.8	11.1			
MEDICAL LABORATORY TECHNOLOGIES, OTHER	#	6	2	2	0	0	0	0	2	0	0
	%		33.3	33.3	.0	.0	.0	.0	33.3	.0	.0
	%	4	50.0	50.0	.0	.0	.0	.0			
ALCOHOL/DRUG ABUSE SPECIALTY	#	3	1	0	0	0	0	1	1	0	0
	%		33.3	.0	.0	.0	.0	33.3	33.3	.0	.0
	%	2	50.0	.0	.0	.0	.0	50.0			

TABLE 2.11

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
COMMUNITY HEALTH WORK											
	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
MENTAL HEALTH/HUMAN SERVICES ASSISTING											
	#	19	7	0	3	0	0	7	1	1	0
	%		36.8	.0	15.8	.0	.0	36.8	5.3	5.3	.0
	%	17	41.2	.0	17.6	.0	.0	41.2			
REHABILITATION COUNSELING											
	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
HABILITATIVE SERVICES											
	#	4	2	0	0	0	0	2	0	0	0
	%		50.0	.0	.0	.0	.0	50.0	.0	.0	.0
	%	4	50.0	.0	.0	.0	.0	50.0			
MENTAL HEALTH/HUMAN SERVICES, OTHER											
	#	2	0	1	0	0	0	0	1	0	0
	%		.0	50.0	.0	.0	.0	.0	50.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
PHARMACY ASSISTING											
	#	3	0	0	0	0	0	0	3	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
PHYSICIAN ASSISTING											
	#	93	27	49	3	0	1	7	6	0	0
	%		29.0	52.7	3.2	.0	1.1	7.5	6.5	.0	.0
	%	87	31.0	56.3	3.4	.0	1.1	8.0			
MISCELLANEOUS ALLIED HEALTH SERVICES, OTHER											
	#	39	9	12	3	0	6	3	6	0	0
	%		23.1	30.8	7.7	.0	15.4	7.7	15.4	.0	.0
	%	33	27.3	36.4	9.1	.0	18.2	9.1			

TABLE 2.11

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
ART THERAPY											
	#	6	1	1	2	0	1	0	1	0	0
	%		16.7	16.7	33.3	.0	16.7	.0	16.7	.0	.0
	%	5	20.0	20.0	40.0	.0	20.0	.0			
MUSIC THERAPY											
	#	23	7	2	3	2	3	1	4	0	1
	%		30.4	8.7	13.0	8.7	13.0	4.3	17.4	.0	4.3
	%	18	38.9	11.1	16.7	11.1	16.7	5.6			
OCCUPATIONAL THERAPY											
	#	33	22	8	0	1	1	1	0	0	0
	%		66.7	24.2	.0	3.0	3.0	3.0	.0	.0	.0
	%	33	66.7	24.2	.0	3.0	3.0	3.0			
PHYSICAL THERAPY											
	#	54	40	13	0	1	0	0	0	0	0
	%		74.1	24.1	.0	1.9	.0	.0	.0	.0	.0
	%	54	74.1	24.1	.0	1.9	.0	.0			
RECREATIONAL THERAPY											
	#	112	28	23	11	4	12	9	3	4	18
	%		25.0	20.5	9.8	3.6	10.7	8.0	2.7	3.6	16.1
	%	87	32.2	26.4	12.6	4.6	13.8	10.3			
RESPIRATORY THERAPY											
	#	23	21	2	0	0	0	0	0	0	0
	%		91.3	8.7	.0	.0	.0	.0	.0	.0	.0
	%	23	91.3	8.7	.0	.0	.0	.0			
SPEECH-LANGUAGE PATHOLOGY/AUDIOLOGY											
	#	28	4	5	0	0	0	0	19	0	0
	%		14.3	17.9	.0	.0	.0	.0	67.9	.0	.0
	%	9	44.4	55.6	.0	.0	.0	.0			
ENVIRONMENTAL HEALTH											
	#	8	3	0	0	0	0	4	1	0	0
	%		37.5	.0	.0	.0	.0	50.0	12.5	.0	.0
	%	7	42.9	.0	.0	.0	.0	57.1			

TABLE 2.11

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
ALLIED HEALTH, OTHER	#	21	6	7	1	0	2	1	2	1	1
	%		28.6	33.3	4.8	.0	9.5	4.8	9.5	4.8	4.8
	%	17	35.3	41.2	5.9	.0	11.8	5.9			
TOTAL		690	307	155	29	9	37	50	75	6	22
			44.5	22.5	4.2	1.3	5.4	7.2	10.9	.9	3.2
		587	52.3	26.4	4.9	1.5	6.3	8.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

5	1	Mental Health, Human Services, Other	100.0	87.8
5	2	Nuclear Medical Technology	100.0	100.0
5	1	Rehabilitation Counseling	100.0	NA
5	23	Respiratory Therapy	100.0	100.0
5	9	Speech-Language Pathology/Audiology	100.0	25.0
10	54	Physical Therapy	98.2	NA
11	17	Dental Hygiene	94.1	84.3
12	33	Occupational Therapy	90.9	100.0
13	87	Physician Assisting, Primary Care	87.3	93.8
14.5	11	Cytotechnology	81.8	100.0
14.5	126	Medical Technology	81.8	
-	587	All Allied Health Graduates	78.7	86.1
16	17	Allied Health, Other	76.5	66.7
17	12	Radiograph Medical Technology	75.0	90.9
18	39	Miscellaneous Allied Health Services, Other	63.7	NA
19	87	Recreational Therapy	58.6	65.4
20.5	18	Music Therapy	50.0	47.6
20.5	2	Alcohol/Drug Abuse Specialty	50.0	NA
22	7	Environmental Health	42.9	NA
23	17	Mental Health, Human Services Assisting	41.2	NA
24	5	Art Therapy	40.0	33.3

This listing suggests that baccalaureate graduates trained in Music Therapy, Recreational Therapy, Art Therapy, Environmental Health, and in Mental Health, Human Services Assisting were not in high demand in 1984 and that the demand for Allied Health graduates declined, overall, in comparison with 1983.

When the proportion of full-time employed graduates who found full-time employment in Pennsylvania is compared across degree fields, the results, below, indicate that these graduates typically tend to seek and find employment in Pennsylvania.

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
4	1	Alcohol/Drug Abuse Specialty	100.0	NA
4	2	Community Health Work	100.0	NA
4	3	Environmental Health	100.0	NA
4	2	Habilitative Services	100.0	50.0
4	10	Mental Health, Human Services, Assisting	100.0	91.7
4	9	Radiograph Medical Technology	100.0	70.0
4	1	Rehabilitation Counseling	100.0	NA
8	23	Respiratory Therapy	91.3	94.7
9	10	Cytotechnology	90.0	57.1
10	15	Medical Laboratory Technology	86.7	80.0
11	106	Medical Technology	80.2	93.2
12	4	Art Therapy	75.0	100.0
13	54	Physical Therapy	74.1	NA
14	14	Music Therapy	71.4	41.2
15	31	Occupational Therapy	71.0	44.0

-	500	All Allied Health Graduates	67.2	76.6
16	16	Dental Hygiene	62.5	77.8
17	66	Recreational Therapy	59.1	60.9
19.5	14	Allied Health, Other	50.0	83.3
19.5	4	Medical Laboratory Technologies, Other	50.0	NA
19.5	24	Miscellaneous Allied Health Services, Other	50.0	NA
19.5	2	Nuclear Medical Technology	50.0	100.0
22	9	Speech-Language Pathology/Audiology	44.4	75.0
23	79	Physician Assisting, Primary Care	38.0	55.5
24	1	Mental Health, Human Services, Other	0.0	NA

Results for Bachelor's Degree Graduates in the Health Sciences

Table 2.12 shows in more detail the major discipline of Health Sciences found in Table 2.0. When Table 2.12 is examined, it is clear that many of the Health Science oriented degree fields are characterized by their graduates going on for advanced degrees in substantial numbers, e.g., Audiology and Speech Pathology graduates, and all of the pre-professional degree graduates in areas such as: pre-medical, pre-dental, etc. Nursing and Medical Laboratory degree holders were the exception probably because their baccalaureate degrees are typically considered terminal degrees for employment purposes.

If we assume, however, that graduates in some of these degree fields did in fact enter the Civilian Labor Market and then attempt to compare the degree fields of Table 2.12 with regard to full-time, degree-related employment, we find the following:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	24	Medical Laboratory	91.7	96.3
2	1,167	Nursing (R.N.)	89.3	95.7
3	9	Medicine	88.9	NA
4	130	Pharmacy	87.7	86.8
-	1,454	All Health Science Graduates	87.3	89.7
5	31	Health Sciences, Other	83.9	20.0
6	8	Public Health Laboratory Science	75.0	42.9
7	3	Audiology and Speech Pathology	66.6	47.1
8	46	Health Sciences Administration	60.5	47.1
9	5	Basic Clinical Health Sciences	60.0	100.0
10	1	Pre-Medicine	0.0	50.0

When the proportion of full-time employed health science graduates who found full-time employment in Pennsylvania is compared across degree fields, the following results are obtained.

TABLE 2.12

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN THE HEALTH SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
AUDIOLOGY AND SPEECH PATHOLOGY	#	14	1	1	0	0	1	0	11	0	0
	%		7.1	7.1	.0	.0	7.1	.0	78.6	.0	.0
	%	3	33.3	33.3	.0	.0	33.3	.0			
BASIC CLINICAL HEALTH SCIENCES	#	6	2	1	1	0	0	1	1	0	0
	%		33.3	16.7	16.7	.0	.0	16.7	16.7	.0	.0
	%	5	40.0	20.0	20.0	.0	.0	20.0			
HEALTH SERVICES ADMINISTRATION	#	96	33	13	8	4	0	18	19	0	1
	%		34.4	13.5	8.3	4.2	.0	18.8	19.8	.0	1.0
	%	76	43.4	17.1	10.5	5.3	.0	23.7			
MEDICAL LABORATORY	#	25	15	7	0	0	0	2	1	0	0
	%		60.0	28.0	.0	.0	.0	8.0	4.0	.0	.0
	%	24	62.5	29.2	.0	.0	.0	8.3			
MEDICINE	#	9	6	2	1	0	0	0	0	0	0
	%		66.7	22.2	11.1	.0	.0	.0	.0	.0	.0
	%	9	66.7	22.2	11.1	.0	.0	.0			
NURSING	#	1,245	856	186	10	22	71	22	37	24	17
	%		68.8	14.9	.8	1.8	5.7	1.8	3.0	1.9	1.4
	%	1,167	73.4	15.9	.9	1.9	6.1	1.9			
PHARMACY	#	179	78	36	3	8	4	1	48	1	0
	%		43.6	20.1	1.7	4.5	2.2	.6	26.8	.6	.0
	%	130	60.0	27.7	2.3	6.2	3.1	.8			
PRE-MEDICINE	#	10	0	0	0	1	0	0	9	0	0
	%		.0	.0	.0	10.0	.0	.0	90.0	.0	.0
	%	1	.0	.0	.0	100.0	.0	.0			

TABLE 2.12

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR BACCALAUREATE DEGREE GRADUATES IN THE HEALTH SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
PUBLIC HEALTH LABORATORY SCIENCE	#	9	5	1	1	0	1	0	1	0	0
	%		55.6	11.1	11.1	.0	11.1	.0	11.1	.0	.0
	%	8	62.5	12.5	12.5	.0	12.5	.0			
HEALTH SCIENCES, OTHER	#	35	7	19	3	0	1	1	4	0	0
	%		20.0	54.3	8.6	.0	2.9	2.9	11.4	.0	.0
	%	31	22.6	61.3	9.7	.0	3.2	3.2			
TOTAL		1,628	1,003	266	27	35	78	45	131	25	18
			61.6	16.3	1.7	2.1	4.8	2.8	8.0	1.5	1.1
		1,454	69.0	18.3	1.9	2.4	5.4	3.1			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	7	Public Health Laboratory Science	85.7	60.0
2	1,074	Nursing (R.N.)	80.6	87.9
3	9	Medicine	77.8	NA
-	1,331	All Health Sciences Graduates	77.4	79.5
4	4	Basic Clincial Sciences	75.0	100.0
5	58	Health Sciences Administration	70.7	48.1
6	22	Medical Laboratory	68.2	69.2
7	125	Pharmacy	64.8	49.7
8	29	Health Sciences, Other	52.6	100.0
9	2	Audiology and Speech Pathology	50.0	80.0
10	1	Pre-Medicine	0.0	100.0

Most health science graduates seeking employment at the baccalaureate level seem to seek and find Pennsylvania based employment with the exception of graduates in Pharmacy and in Health Science Administration.

Results for Bachelor's Degree Graduates in the Physical Sciences

Table 2.13 gives a detailed breakout of the major discipline of Physical Sciences found in of Table 2.0. Inspection of Table 2.13 suggests that, with the exception of Chemistry and Physics, and, to some extent, Atmospheric Sciences and Meteorology, baccalaureate graduates in the physical sciences are typically finding it difficult to find degree-related work when they enter into the Civilian Labor Market. A substantial number, however, do go on for an advanced degree at a level where degree-related employment is much more readily obtained.

The Physical Science degree fields, when compared on the basis of the proportion of graduates in the Civilian Labor Market who found degree-related employment in 1984, ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	1	Astronomy	100.0	0.0
2	191	Chemistry	70.7	65.1
3	10	Atmosphere Science and Meterology	70.0	50.0
4	56	Physics	67.8	57.4
-	416	All Physical Science Graduates	58.4	50.2
5	9	Physical Sciences, General	55.5	100.0
6	41	Miscellaneous Physical Sciences	43.9	NA
7	99	Geological Sciences	37.4	25.6
8	9	Physical Sciences, Other	22.2	42.8

It should be noted that only one of the three reported recipients of a degree in Astronomy had entered the job market The other two had gone on for an advanced degree. These findings are consistent with the fact that the doctoral degree is the accepted terminal degree for graduates in Astronomy.

TABLE 2.13

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN THE PHYSICAL SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
PHYSICAL SCIENCES, GENERAL	#	12	4	1	0	0	0	4	2	1	0
	%		33.3	8.3	.0	.0	.0	33.3	16.7	8.3	.0
	%	9	44.4	11.1	.0	.0	.0	44.4			
ASTRONOMY	#	3	0	1	0	0	0	0	2	0	0
	%		.0	33.3	.0	.0	.0	.0	66.7	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
ATMOSPHERIC SCIENCES AND METEOROLOGY	#	14	5	2	0	0	0	3	4	0	0
	%		35.7	14.3	.0	.0	.0	21.4	28.6	.0	.0
	%	10	50.0	20.0	.0	.0	.0	30.0			
CHEMISTRY	#	445	77	58	10	4	9	33	242	7	5
	%		17.3	13.0	2.2	.9	2.0	7.4	54.4	1.6	1.1
	%	191	40.3	30.4	5.2	2.1	4.7	17.3			
GEOLOGICAL SCIENCES	#	164	18	19	22	9	3	28	51	4	10
	%		11.0	11.6	13.4	5.5	1.8	17.1	31.1	2.4	6.1
	%	99	18.2	19.2	22.2	9.1	3.0	28.3			
MISCELLANEOUS PHYSICAL SCIENCES	#	52	10	8	9	3	1	10	7	4	0
	%		19.2	15.4	17.3	5.8	1.9	19.2	13.5	7.7	.0
	%	41	24.4	19.5	22.0	7.3	2.4	24.4			
PHYSICS	#	120	13	25	4	1	1	12	55	1	8
	%		10.8	20.8	3.3	.8	.8	10.0	45.8	.8	6.7
	%	56	23.2	44.6	7.1	1.8	1.8	21.4			
PHYSICAL SCIENCES, OTHER	#	10	2	0	1	2	0	4	1	0	0
	%		20.0	.0	10.0	20.0	.0	40.0	10.0	.0	.0
	%	9	22.2	.0	11.1	22.2	.0	44.4			

TABLE 2.13

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN THE PHYSICAL SCIENCES, 1984

	TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TOTAL										
	820	129	114	46	19	14	94	364	17	23
		15.7	13.9	5.6	2.3	1.7	11.5	44.4	2.1	2.8
	416	31.0	27.4	11.1	4.6	3.4	22.6			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

When full-time employed Physical Science graduates are compared on the basis of the percentage of full-time employment in Pennsylvania, the following ranking results (Astronomy graduates excluded):

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	5	Physical Sciences, General	80.0	0.0
2	7	Atmosphere Science and Meterology	71.4	44.4
3	30	Miscellaneous Physical Sciences	65.3	NA
4	5	Physical Sciences, Other	60.0	37.5
5	68	Geological Sciences	58.8	44.4
6	149	Chemistry	58.4	66.2
-	308	All Physical Science Graduates	56.8	55.8
7	43	Physics	39.5	43.9
8	1	Astronomy	0.0	NA

Results for Bachelor's Degree Graduates in Psychology

Table 2.14 summarizes the 1984 detailed postgraduate activity findings for the Psychology category of Table 2.0. These graduates, despite the fact that for employment purposes, psychology is normally considered to not be a terminal degree at the baccalaureate level, seventy-one percent of these graduates found degree related employment. This is substantially higher than the rates for the Physical Sciences (58.4%) or for Social Sciences (48.5%). Roughly one-third (30.4%) of the Psychology graduates went on to graduate school rather than enter the labor market at this degree level.

When the specialty areas of Psychology were ranked according to the proportion of graduates who had found degree-related, full-time employment, the following ranking resulted:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	2	Clinical Psychology	100.0	NA
1.5	5	Physiological Psychology	100.0	58.3
3	27	Psychology, Other	81.5	47.8
4	7	Social Psychology	71.4	50.0
-	920	All Psychology Graduates	39.1	50.2
5	879	General Psychology	37.0	49.5

It is apparent that graduates from relatively rare speciality-oriented programs were much more likely to find degree-related employment at the baccalaureate level.

When ranked on the basis of the percentage of full-time employed graduates who found Pennsylvania based employment, the results are as follows:

TABLE 2.14

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN PSYCHOLOGY, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
PSYCHOLOGY, GENERAL	#	2,170	237	88	140	66	244	104	661	608	22
	%		10.9	4.1	6.5	3.0	11.2	4.8	30.5	28.0	1.0
	%	879	27.0	10.0	15.9	7.5	27.8	11.8			
CLINICAL PSYCHOLOGY	#	4	1	1	0	0	0	0	1	0	1
	%		25.0	25.0	.0	.0	.0	.0	25.0	.0	25.0
	%	2	50.0	50.0	.0	.0	.0	.0			
PHYSIOLOGICAL PSYCHOLOGY	#	15	3	2	0	0	0	0	10	0	0
	%		20.0	13.3	.0	.0	.0	.0	66.7	.0	.0
	%	5	60.0	40.0	.0	.0	.0	.0			
SOCIAL PSYCHOLOGY	#	9	5	0	1	0	0	1	1	0	1
	%		55.6	.0	11.1	.0	.0	11.1	11.1	.0	11.1
	%	7	71.4	.0	14.3	.0	.0	14.3			
PSYCHOLOGY, OTHER	#	33	14	8	1	1	2	1	6	0	0
	%		42.4	24.2	3.0	3.0	6.1	3.0	18.2	.0	.0
	%	27	51.9	29.6	3.7	3.7	7.4	3.7			
TOTAL		2,231	260	99	142	67	246	106	679	608	24
			11.7	4.4	6.4	3.0	11.0	4.8	30.4	27.3	1.1
		920	28.3	10.8	15.4	7.3	26.7	11.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	6	Social Psychology	100.0	100.0
2	908	General Psychology	71.0	69.6
-	568	All Psychology Graduates	70.8	70.6
3	24	Psychology, Other	62.5	77.8
4	5	Physiological Psychology	60.0	100.0
5	2	Clinical Psychology	50.0	NA

Results for Bachelor's Degree Graduates in the Social Sciences

Table 2.15 summarizes the 1984 detailed postgraduate activity findings for the Social Sciences category of Table 2.0. These graduates had even more difficulty in obtaining degree-related employment than did the Physical Science graduates, i.e., 48.5 percent compared to 58.4 percent for the Physical Science graduates.

As might be expected, some of the Social Sciences in Table 2.15 have a substantial proportion of their graduates going on for an advanced degree even though only twenty-six percent did so for the Social Sciences as a whole. Graduates in History (31.5%), International Relations (33.3%) and Political Science and Government (40.6%) were the most likely to pursue an advanced degree in 1984.

Many of the graduates in the Social Sciences chose, however, to seek employment in the Civilian Labor Market. When the Social Science degree fields of Table 2.15 were ranked according to the proportion of graduates in the Civilian Labor Market who had found degree-related, full-time employment, the following ranking resulted:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	500	Economics	71.0	56.8
2	74	Criminology	70.3	60.9
3	77	Social Sciences, Other	53.3	50.0
4	195	Sociology	48.7	38.1
5	50	International Relations	48.0	70.3
6	39	Geography	46.1	31.1
-	1,523	All Social Science Graduates	48.5	41.4
7	34	Social Sciences, General	35.3	36.8
8	27	Social Sciences Unique to Pennsylvania	33.3	50.0
9	26	Anthropology	30.8	10.0
10	275	Political Science and Government	26.5	26.9
11	214	History	22.9	21.9
12	11	Urban Studies	18.2	57.1
13	1	Archeology	0.0	0.0

TABLE 2.15

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN THE SOCIAL SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
SOCIAL SCIENCES, GENERAL	#	49	8	4	8	5	0	9	14	0	1
	%		16.3	8.2	16.3	10.2	.0	18.4	28.6	.0	2.0
	%	34	23.5	11.8	23.5	14.7	.0	26.5			
ANTHROPOLOGY	#	44	4	4	5	5	2	6	12	0	6
	%		9.1	9.1	11.4	11.4	4.5	13.6	27.3	.0	13.6
	%	26	15.4	15.4	19.2	19.2	7.7	23.1			
ARCHEOLOGY	#	1	0	0	1	0	0	0	0	0	0
	%		.0	.0	100.0	.0	.0	.0	.0	.0	.0
	%	1	.0	.0	100.0	.0	.0	.0			
CRIMINOLOGY	#	91	46	6	0	0	8	14	8	5	4
	%		50.5	6.6	.0	.0	8.8	15.4	8.8	5.5	4.4
	%	74	62.2	8.1	.0	.0	10.8	18.9			
ECONOMICS	#	641	168	187	34	36	11	64	123	6	12
	%		26.2	29.2	5.3	5.6	1.7	10.0	19.2	.9	1.9
	%	500	33.6	37.4	6.8	7.2	2.2	12.8			
GEOGRAPHY	#	53	11	7	5	1	2	13	8	3	3
	%		20.8	13.2	9.4	1.9	3.8	24.5	15.1	5.7	5.7
	%	39	28.2	17.9	12.8	2.6	5.1	33.3			
HISTORY	#	371	30	19	62	39	20	44	117	21	19
	%		8.1	5.1	16.7	10.5	5.4	11.9	31.5	5.7	5.1
	%	214	14.0	8.9	29.0	18.2	9.3	20.6			
INTERNATIONAL RELATIONS	#	84	10	14	2	8	2	14	28	6	0
	%		11.9	16.7	2.4	9.5	2.4	16.7	33.3	7.1	.0
	%	50	20.0	28.0	4.0	16.0	4.0	28.0			

TABLE 2.15

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN THE SOCIAL SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
POLITICAL SCIENCE AND GOVERNMENT	#	554	41	32	70	66	10	56	225	14	40
	%		7.4	5.8	12.6	11.9	1.8	10.1	40.6	2.5	7.2
	%	275	14.9	11.6	25.5	24.0	3.6	20.4			
SOCIOLOGY	#	251	81	14	37	25	13	25	44	6	6
	%		32.3	5.6	14.7	10.0	5.2	10.0	17.5	2.4	2.4
	%	195	41.5	7.2	19.0	12.8	6.7	12.8			
URBAN STUDIES	#	14	2	0	2	0	1	6	1	1	1
	%		14.3	.0	14.3	.0	7.1	42.9	7.1	7.1	7.1
	%	11	18.2	.0	18.2	.0	9.1	54.5			
SOCIAL SCIENCE STUDIES UNIQUE TO PENNSYLVANIA	#	37	5	4	4	6	0	8	9	1	0
	%		13.5	10.8	10.8	16.2	.0	21.6	24.3	2.7	.0
	%	27	18.5	14.8	14.8	22.2	.0	29.6			
SOCIAL SCIENCES, OTHER	#	90	31	10	18	1	5	12	8	1	4
	%		34.4	11.1	20.0	1.1	5.6	13.3	8.9	1.1	4.4
	%	77	40.3	13.0	23.4	1.3	6.5	15.6			
TOTAL		2,280	437	301	248	192	74	271	597	64	96
			19.2	13.2	10.9	8.4	3.2	11.9	26.2	2.8	4.2
		1,523	28.7	19.8	16.3	12.6	4.9	17.8			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

It is obvious from the above listing that Social Science graduates have considerable difficulty finding degree-related employment at the baccalaureate level.

In contrast to most of the other major disciplines found in Table 2.0, the Social Sciences graduates of 1984 still tended to have a substantial rate of unemployment (17.8%) when they entered the Civilian Labor Force. When the rates of Civilian Labor Force unemployment for the Social Sciences were ranked, the individual degree fields ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	11	Urban Studies	54.5	42.9
2	39	Geography	33.3	26.7
3	27	Social Sciences Unique to Pennsylvania	29.6	13.6
4	50	International Relations	28.0	25.0
5	34	Social Sciences, General	26.5	10.5
6	26	Anthopology	23.1	47.1
-	1,523	All Social Science Graduates	17.8	21.3
7	214	History	20.6	19.2
8	275	Political Science and Government	20.4	20.7
9	74	Criminology	18.9	25.3
10	77	Social Sciences, Other	15.6	16.7
11.5	500	Economics	12.8	21.5
11.5	195	Sociology	12.8	21.3
13	1	Archeology	0.0	0.0

Apparently graduates in the Social Sciences tend to persist in finding degree-related employment even though a substantial period of unemployment is required.

When the Social Science degree fields of Table 2.15 were ranked according to the percentage of full-time employed graduates who had found full-time employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	1	Archeology	100.0	100.0
1.5	4	Urban Studies	100.0	100.0
3	52	Criminology	88.5	84.9
4	60	Social Sciences, Other	81.7	81.6
5	157	Sociology	75.2	71.8
6	24	Geography	66.7	55.5
7	25	Social Sciences, General	64.0	64.3
8	150	History	61.3	58.1
-	1,178	All Social Science Graduates	58.1	57.7
9	209	Political Science and Government	53.1	57.5
10	18	Anthropology	50.0	75.0
11	425	Economics	47.5	45.7

12	19	Social Science Studies Unique to Pennsylvania	47.4	37.5
13	34	International Relations	35.3	17.6

Results for Bachelor's Degree Graduates in the Precision Production Trades

Table 2.16 gives a detailed summary of the degree fields covered by the major discipline category of Precision Production found in Table 2.0.

Examination of Table 2.16 reveals that, at the baccalaureate level, this category primarily consists of graduates in Graphics and Printing Communications.

Fifty-seven percent of the graduates in the General Graphics and Communications category who entered the Civilian Labor Market found degree-related full-time employment, 87.5 percent of the Graphic Communications Technology graduates did so, and 33 percent of the seven graduates in the general category of Precision Production, Other, found such employment. Overall, 66.7 percent of these graduates found degree-related employment upon their entry into the Civilian Labor Market.

With regard to employment in Pennsylvania, 100.0 percent of the full-time employed Precision Production, Other graduates found employment in Pennsylvania. In addition, 75 percent of the Graphic and Printing Communications, General graduates found such employment as well as 87.5 percent of the Graphics Communications Technology graduates. Overall, 84.6 percent of the 1984 Precision Production full-time employed graduates were found to be employed in Pennsylvania.

Results for Bachelor's Degree Graduates in the Visual and Performing Arts

Table 2.17 gives detailed degree field information for the Visual and Performing Arts category found in Table 2.0.

When the figures of Table 2.17 are viewed, the strongest impression is one of a general distribution of graduates across all of the Civilian Labor Market categories and relatively few graduates in the last three columns of Table 2.17. Graduates in the Visual and Performing Arts are therefore very much in the labor market but they experience varying degrees of success in finding degree-related and/or full-time employment. In addition, it is interesting to note that work on an advanced degree is, in general, not typical of these graduates with the exception of graduates in Music (29.1%).

When the Visual and Performing Arts degree fields of Table 2.17 were ranked according to the proportion of graduates in the Civilian Labor Market who found degree-related full-time employment they ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	5	Visual and Peforming Arts, General	100.0	48.1
2	167	Design	70.6	75.9
3	57	Dramatic Arts	66.7	64.1
4	34	Visual and Performing Arts, Other	55.9	63.9

TABLE 2.16

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN GRAPHIC AND PRINTING COMMUNICATIONS AND IN PRECISION PRODUCTION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
GRAPHIC AND PRINTING COMMUNICATIONS, GENERAL											
	#	10	3	1	0	0	3	0	1	0	2
	%		30.0	10.0	.0	.0	30.0	.0	10.0	.0	20.0
	%	7	42.9	14.3	.0	.0	42.9	.0			
GRAPHICS COMMUNICATIONS TECHNOLOGY											
	#	8	6	1	1	0	0	0	0	0	0
	%		75.0	12.5	12.5	.0	.0	.0	.0	.0	.0
	%	8	75.0	12.5	12.5	.0	.0	.0			
PRECISION PRODUCTION, OTHER											
	#	3	1	0	0	0	1	1	0	0	0
	%		33.3	.0	.0	.0	33.3	33.3	.0	.0	.0
	%	3	33.3	.0	.0	.0	33.3	33.3			
TOTAL											
		21	10	2	1	0	4	1	1	0	2
			47.6	9.5	4.8	.0	19.0	4.8	4.8	.0	9.5
		18	55.6	11.1	5.6	.0	22.2	5.6			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 2.17

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN THE VISUAL AND PERFORMING ARTS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
VISUAL AND PERFORMING ARTS, GENERAL	#	9	4	1	0	0	0	0	2	0	2
	%		44.4	11.1	.0	.0	.0	.0	22.2	.0	22.2
	%	5	80.0	20.0	.0	.0	.0	.0			
CRAFTS	#	55	15	10	5	4	11	8	2	0	0
	%		27.3	18.2	9.1	7.3	20.0	14.5	3.6	.0	.0
	%	53	28.3	18.9	9.4	7.5	20.8	15.1			
DANCE	#	7	1	1	1	1	1	1	1	0	0
	%		14.3	14.3	14.3	14.3	14.3	14.3	14.3	.0	.0
	%	6	16.7	16.7	16.7	16.7	16.7	16.7			
DESIGN	#	181	61	57	14	4	8	23	5	1	8
	%		33.7	31.5	7.7	2.2	4.4	12.7	2.8	.6	4.4
	%	167	36.5	34.1	8.4	2.4	4.8	13.8			
DRAMATIC ARTS	#	68	11	27	6	3	5	5	6	0	5
	%		16.2	39.7	8.8	4.4	7.4	7.4	8.8	.0	7.4
	%	57	19.3	47.4	10.5	5.3	8.8	8.8			
FILM ARTS	#	37	7	5	7	2	8	3	2	1	2
	%		18.9	13.5	18.9	5.4	21.6	8.1	5.4	2.7	5.4
	%	32	21.9	15.6	21.9	6.3	25.0	9.4			
FINE ARTS	#	376	71	63	66	23	32	45	57	1	18
	%		18.9	16.8	17.6	6.1	8.5	12.0	15.2	.3	4.8
	%	300	23.7	21.0	22.0	7.7	10.7	15.0			
GRAPHIC ARTS TECHNOLOGY	#	3	0	1	0	1	1	0	0	0	0
	%		.0	33.3	.0	33.3	33.3	.0	.0	.0	.0
	%	3	.0	33.3	.0	33.3	33.3	.0			

TABLE 2.17

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE HELD FOR BACCALAUREATE DEGREE GRADUATES IN THE VISUAL AND PERFORMING ARTS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
MUSIC	#	175	36	15	35	7	19	7	51	2	3
	%		20.6	8.6	20.0	4.0	10.9	4.0	29.1	1.1	1.7
	%	119	30.3	12.6	29.4	5.9	16.0	5.9			
VISUAL AND PERFORMING ARTS, OTHER	#	37	8	11	4	0	7	4	2	0	1
	%		21.6	29.7	10.8	.0	18.9	10.8	5.4	.0	2.7
	%	34	23.5	32.4	11.8	.0	20.6	11.8			
TOTAL		948	214	191	138	45	92	96	128	5	39
			22.6	20.1	14.6	4.7	9.7	10.1	13.5	.5	4.1
		776	27.6	24.6	17.8	5.8	11.9	12.4			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

-	776	All Visual and Performing Arts Graduates	52.2	51.1
5	53	Crafts	47.2	22.2
6	300	Fine Arts	44.7	44.7
7	119	Music	42.9	40.6
8	32	Film Arts	37.5	30.0
9.5	6	Dance	33.4	0.0
9.5	3	Graphic Arts Technology	33.3	NA

In terms of the proportion of full-time employed Visual and Performing Arts graduates who found full-time employment in Pennsylvania, the degree fields of Table 2.17 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	5	Visual and Performing Arts, General	80.0	80.0
2	93	Music	76.3	66.7
3	21	Film Arts	66.7	75.0
4	223	Fine Arts	61.4	70.9
-	588	All Visual and Performing Arts Graduates	59.9	62.3
5	34	Crafts	58.8	80.0
6	136	Design	55.1	47.8
7	23	Visual and Performing Arts, Other	52.2	72.0
8	4	Dance	50.0	NA
9	47	Dramatic Arts	36.2	34.7
10	2	Graphic Arts Technology	0.0	NA

The findings for graduates in the degree field of Visual and Performing Arts seem to reflect the basic nature of employment in this general area, i.e., it is frequently located outside of Pennsylvania and the job market is generally very competitive. A substantial portion (13.5%) of these graduates go on for an advanced degree, e.g., Dance (14.3%), Fine Arts (15.2%), and Music (29.1%).

SOME COMMENTS ON THE FINDINGS FOR BACCALAUREATE DEGREE GRADUATES

Although the rate of full-time, degree-related employment tends to be somewhat lower for these graduates than for the recipients of other degrees, it should be remembered that the baccalaureate degree is often not the terminal degree for its recipient. This is in distinct contrast to the picture for the associate degree and for the higher degrees where there is a substantially higher incidence of preparation for entry into a specific profession or occupation. In addition, many of the degree fields in higher education at this level are, by definition, more generalized and less occupation oriented. Liberal Arts oriented graduates, however, may be successful, over the long run, in finding satisfying employment because their preparation has enabled them to readily master the requirements of a job and to rise to higher levels of responsibility.

In sum, the findings of this report concerning the baccalaureate graduates of 1984 suggest that a bachelor's degree is still a viable option.

IX. RESULTS FOR MASTER'S DEGREE GRADUATES

Table 3.0, on the pages that follow, summarizes the postgraduate activity of the master's graduates of 1983-84 in terms of the broadest (2-digit level) Classification of Instructional Programs (CIP) categories available. As before, a more detailed analysis of selected major disciplines from Table 3.0 will be made using a combination of the four-digit and six-digit levels of the CIP classification system.

The findings of Table 3.0 are given in terms of two separate percentage distributions that accompany the numerical counts for a given major discipline area. Numerical counts are shown for each of the postgraduate activity categories used in this study. The first of the two percentage distributions is simply the percentage of reported graduates in each type of activity. The second percentage distribution indicates the percentage of graduates in the Civilian Labor Market engaged in employment-related activity, i.e., it excludes those in military service, those pursuing an advanced degree, and those engaged in activity unrelated to employment.

For each of the major disciplines, the findings are given in terms of: (1) the number of graduates who found degree-related employment in Pennsylvania, (2) the number of graduates who found degree-related employment outside of Pennsylvania, (3) the number of graduates who found employment in Pennsylvania that was unrelated to their degree field, (4) the number of graduates who found employment outside of Pennsylvania that was unrelated to their degree field, (5) the number of graduates who found part-time employment, (6) the number of graduates who were unemployed and still seeking employment, (7) the number of graduates who had entered military service, (8) the number of graduates who were pursuing an advanced degree and, finally, (9) the number of graduates who were engaged in other activities, i.e., those not employed and not in graduate school but who were also not seeking employment.

Below is a comparison of selected measures on the master's degree graduates of 1977-78 through 1983-84. The measures were derived from this report and from previous reports in this series.

Year	Reported Graduates	Full-Time Employed	Part-Time Employed	Un-employed	Seeking Advanced Degree	Full-Time Employed In Field Prepared	Full-Time Employed In Pa.
		%	%	%	%	%	%
1977	4,207	81.0	2.0	7.3	9.7	90.5	75.7
1978	3,847	82.1	2.3	5.5	10.1	90.8	77.3
1979	3,567	83.7	2.7	4.7	8.9	92.3	70.2
1980	3,780	84.1	2.7	4.5	8.7	90.1	74.0
1981	3,503	81.2	3.0	6.1	9.6	89.3	69.9
1982	3,414	78.4	4.0	5.9	10.8	89.3	70.7
1983	2,285	74.5	2.5	6.0	14.6	86.9	66.6
1984	3,031	76.5	3.9	4.7	9.8	89.1	65.7

TABLE 3.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR MASTER S DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
01 AGRIBUSINESS AND AGRICULTURAL PRODUCTION	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
02 AGRICULTURAL SCIENCES	#	18	4	4	1	0	1	0	7	1	0
	%		22.2	22.2	5.6	.0	5.6	.0	38.9	5.6	.0
	%	10	40.0	40.0	10.0	.0	10.0	.0			
03 RENEWABLE NATURAL RESOURCES	#	10	3	2	0	1	1	2	1	0	0
	%		30.0	20.0	.0	10.0	10.0	20.0	10.0	.0	.0
	%	9	33.3	22.2	.0	11.1	11.1	22.2			
04 ARCHITECTURE AND ENVIRONMENTAL DESIGN	#	15	8	6	1	0	0	0	0	0	0
	%		53.3	40.0	6.7	.0	.0	.0	.0	.0	.0
	%	15	53.3	40.0	6.7	.0	.0	.0			
05 AREA AND ETHNIC STUDIES	#	7	4	0	0	0	0	0	0	0	3
	%		57.1	.0	.0	.0	.0	.0	.0	.0	42.9
	%	4	100.0	.0	.0	.0	.0	.0			
06 BUSINESS AND MANAGEMENT	#	550	246	200	27	3	5	32	23	2	12
	%		44.7	36.4	4.9	.5	.9	5.8	4.2	.4	2.2
	%	513	48.0	39.0	5.3	.6	1.0	6.2			
08 MARKETING AND DISTRIBUTION	#	8	4	0	1	0	0	2	0	0	1
	%		50.0	.0	12.5	.0	.0	25.0	.0	.0	12.5
	%	7	57.1	.0	14.3	.0	.0	28.6			

TABLE 3.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR MASTER S DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
09 COMMUNICATIONS											
	#	43	17	13	6	0	2	5	0	0	0
	%		39.5	30.2	14.0	.0	4.7	11.6	.0	.0	.0
	%	43	39.5	30.2	14.0	.0	4.7	11.6			
11 COMPUTER AND INFORMATION SCIENCES											
	#	52	20	17	0	1	3	3	8	0	0
	%		38.5	32.7	.0	1.9	5.8	5.8	15.4	.0	.0
	%	44	45.5	38.6	.0	2.3	6.8	6.8			
13 EDUCATION											
	#	977	556	160	101	13	45	36	42	0	24
	%		56.9	16.4	10.3	1.3	4.6	3.7	4.3	.0	2.5
	%	911	61.0	17.6	11.1	1.4	4.9	4.0			
14 ENGINEERING											
	#	230	43	105	1	0	1	14	48	5	13
	%		18.7	45.7	.4	.0	.4	6.1	20.9	2.2	5.7
	%	164	26.2	64.0	.6	.0	.6	8.5			
15 ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES											
	#	12	8	2	0	0	0	1	1	0	0
	%		66.7	16.7	.0	.0	.0	8.3	8.3	.0	.0
	%	11	72.7	18.2	.0	.0	.0	9.1			
16 FOREIGN LANGUAGES											
	#	11	4	3	0	0	1	0	2	0	1
	%		36.4	27.3	.0	.0	9.1	.0	18.2	.0	9.1
	%	8	50.0	37.5	.0	.0	12.5	.0			
17 ALLIED HEALTH											
	#	30	17	8	0	0	2	2	1	0	0
	%		56.7	26.7	.0	.0	6.7	6.7	3.3	.0	.0
	%	29	58.6	27.6	.0	.0	6.9	6.9			

TABLE 3.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR MASTER'S DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED OTHER IN PA	EMPLOYED OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
18 HEALTH SCIENCES	#	109	57	35	5	1	2	5	2	1	1
	%		52.3	32.1	4.6	.9	1.8	4.6	1.8	.9	.9
	%	105	54.3	33.3	4.8	1.0	1.9	4.8			
19 HOME ECONOMICS	#	11	2	0	0	1	1	5	2	0	0
	%		18.2	.0	.0	9.1	9.1	45.5	18.2	.0	.0
	%	9	22.2	.0	.0	11.1	11.1	55.6			
22 LAW	#	110	45	25	10	0	8	0	0	0	22
	%		40.9	22.7	9.1	.0	7.3	.0	.0	.0	20.0
	%	88	51.1	28.4	11.4	.0	9.1	.0			
23 LETTERS	#	58	26	8	8	1	1	4	5	0	5
	%		44.8	13.8	13.8	1.7	1.7	6.9	8.6	.0	8.6
	%	48	54.2	16.7	16.7	2.1	2.1	8.3			
24 LIBERAL/GENERAL STUDIES	#	3	0	1	0	0	2	0	0	0	0
	%		.0	33.3	.0	.0	66.7	.0	.0	.0	.0
	%	3	.0	33.3	.0	.0	66.7	.0			
25 LIBRARY AND ARCHIVAL SCIENCES	#	30	11	12	1	0	1	4	1	0	0
	%		36.7	40.0	3.3	.0	3.3	13.3	3.3	.0	.0
	%	29	37.9	41.4	3.4	.0	3.4	13.8			
26 LIFE SCIENCES	#	63	22	16	1	1	3	2	15	0	3
	%		34.9	25.4	1.6	1.6	4.8	3.2	23.8	.0	4.8
	%	45	48.9	35.6	2.2	2.2	6.7	4.4			

TABLE 3.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR MASTER S DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
27 MATHEMATICS	#	33	8	10	0	0	1	2	9	0	3
	%		24.2	30.3	.0	.0	3.0	6.1	27.3	.0	9.1
	%	21	38.1	47.6	.0	.0	4.8	9.5			
30 MULTI/INTERDISCIPLINARY STUDIES	#	29	16	6	3	0	0	0	1	0	3
	%		55.2	20.7	10.3	.0	.0	.0	3.4	.0	10.3
	%	25	64.0	24.0	12.0	.0	.0	.0			
31 PARKS AND RECREATION	#	3	2	0	0	0	0	0	0	0	1
	%		66.7	.0	.0	.0	.0	.0	.0	.0	33.3
	%	2	100.0	.0	.0	.0	.0	.0			
38 PHILOSOPHY AND RELIGION	#	29	1	4	3	3	0	2	13	0	3
	%		3.4	13.8	10.3	10.3	.0	6.9	44.8	.0	10.3
	%	13	7.7	30.8	23.1	23.1	.0	15.4			
39 THEOLOGY	#	9	2	1	0	1	0	0	1	0	4
	%		22.2	11.1	.0	11.1	.0	.0	11.1	.0	44.4
	%	4	50.0	25.0	.0	25.0	.0	.0			
40 PHYSICAL SCIENCES	#	94	22	22	6	3	2	1	38	0	0
	%		23.4	23.4	6.4	3.2	2.1	1.1	40.4	.0	.0
	%	56	39.3	39.3	10.7	5.4	3.6	1.8			
42 PSYCHOLOGY	#	124	39	15	3	4	5	7	32	0	19
	%		31.5	12.1	2.4	3.2	4.0	5.6	25.8	.0	15.3
	%	73	53.4	20.5	4.1	5.5	6.8	9.6			

TABLE 3.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR MASTER S DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
43 PROTECTIVE SERVICES	#	27	26	1	0	0	0	0	0	0	0
	%		96.3	3.7	.0	.0	.0	.0	.0	.0	.0
	%	27	96.3	3.7	.0	.0	.0	.0			
44 PUBLIC AFFAIRS	#	178	76	30	16	15	5	4	8	20	4
	%		42.7	16.9	9.0	8.4	2.8	2.2	4.5	11.2	2.2
	%	146	52.1	20.5	11.0	10.3	3.4	2.7			
45 SOCIAL SCIENCES	#	82	21	14	3	5	7	2	29	0	1
	%		25.6	17.1	3.7	6.1	8.5	2.4	35.4	.0	1.2
	%	52	40.4	26.9	5.8	9.6	13.5	3.8			
50 VISUAL AND PERFORMING ARTS	#	75	15	22	4	0	18	6	7	0	3
	%		20.0	29.3	5.3	.0	24.0	8.0	9.3	.0	4.0
	%	65	23.1	33.8	6.2	.0	27.7	9.2			
TOTAL		3,031	1,325	743	201	53	117	141	296	29	126
			43.7	24.5	6.6	1.7	3.9	4.7	9.8	1.0	4.2
		2,580	51.4	28.8	7.8	2.1	4.5	5.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

There are several trends in the above listing. For example, despite the fact that the percentage of 1983 master's degree graduates finding full-time employment was the lowest of this series, the number going on for an advanced degree in 1984 reversed this trend. The percentage figure for 1984 was still not as high as those found in the earlier part of this period. This suggests that master's degree graduates are still inclined to see their degrees as only a step toward a higher degree rather than as a terminal degree. Going on for an even more advanced degree is probably an intelligent choice on their part, one that reflects the realities of the job market for master's degree graduates in 1984. The fact that the high proportion of full-time employed 1984 graduates who found degree-related employment was typical of that reported during these years suggests, however, that when they do enter the job market they are highly successful in terms of degree-related employment. The proportion of last year's graduates (full-time employed) obtaining Pennsylvania employment was likewise the lowest of this period. This also suggests that job market realities may be operating here.

Master's Degree Graduates Employed Full-Time in Their Field of Preparation

Table 3.01 ranks the major disciplines of Table 3.0 according to the proportion of master's degree graduates who found full-time employment related to their field of preparation. In general, the disciplines at the top of Table 3.01 are those that do not have a large proportion of their graduates going on for an advanced degree. These disciplines tend to be those for which the degree is frequently viewed as the terminal degree. Those at the bottom of Table 3.01 are more likely to be those with a large proportion of their graduates going on for an advanced degree, and the master's degree is seen as a stepping stone to a higher degree.

The data of Table 3.01, however, do not clearly indicate what happens to a graduate who decides not to go on for an advanced degree but rather to enter the Civilian Labor Market in search of employment. This requires a somewhat different analysis using the concept of the Civilian Labor Market.

Full-Time Degree-Related Employment of Master's Degree Graduates in the Civilian Labor Market

Table 3.02 reflects the relative rankings of the major disciplines when only those employed in the Civilian Labor Market are considered. The resulting changes can be dramatic, e.g., the shift of Computer and Information Systems from a rank of 27 to a rank of 2.5.

Table 3.02 indicates that the disciplines of Table 3.0 are generally characterized by most of their graduates finding degree-related employment. The proportion finding such employment varies widely, however, ranging from 100 percent for graduates in major disciplines such as Protective Services down to only 22.2 percent for graduates in the major discipline area of Home Economics. Nevertheless, only three of these disciplines had a degree-related employment rate that was at or below fifty percent, i.e., Philosophy and Religion, Liberal and General Studies, and Home Economics. Approximately sixty-six percent of the disciplines of Table 3.02 had at least seventy-five percent of their graduates finding degree-related employment when they entered the Civilian Labor Market.

TABLE 3.01

A RANK ORDERING OF MASTERS DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES FINDING FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1.5	Agribusiness and Agricultural Production	100.0*	40.0*
1.5	Protective Services	100.0	100.0*
3	Architecture and Environmental Design	93.3	66.7
4	Health Sciences	84.4	75.3
5.5	Engineering and Engineering-Related Technologies	83.3	40.0*
5.5	Allied Health	83.3	90.7
7	Business and Management	81.1	79.7
8	Library and Archival Sciences	76.7	55.0
9	Multi/Interdisciplinary Studies	75.9	66.7
10	Education	73.3	70.2
11	Computer and Information Sciences	71.2	26.3
12	Communications	69.8	56.3
-	All Graduates	68.2	64.8
13	Parks and Recreation	66.7*	28.6*
14	Engineering	64.3	56.0
15.5	Foreign Languages	63.6	40.0
15.5	Law	63.6	NA
17	Life Sciences	60.3	44.9
18	Public Affairs	59.6	63.8
19	Letters	58.6	52.4
20	Area and Ethnic Studies	57.1*	50.0*
21	Mathematics	54.5	57.1
22.5	Renewable Natural Resources	50.0*	25.0*
22.5	Marketing and Distribution	50.0*	NA
24	Visual and Performing Arts	49.3	62.3
25	Physical Sciences	46.8	46.3
26	Agricultural Sciences	44.4	50.0
27	Psychology	43.5	56.0
28	Social Studies	42.7	43.0
29.5	Liberal/General Studies	33.3*	25.0*
29.5	Theology	33.3*	28.6*
31	Home Economics	18.2	42.9*
32	Philosophy and Religion	17.2	22.3

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED STUDENTS.

TABLE 3.02

A RANK ORDERING OF MASTERS DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES IN THE CIVILIAN LABOR MARKET WHO FOUND FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
2.5	Agribusiness and Agricultural Production	100.0*	66.6*
2.5	Area and Ethnic Studies	100.0*	100.0*
2.5	Parks and Recreation	100.0*	NA
2.5	Protective Services	100.0	100.0*
5	Architecture and Environmental Design	93.3	77.0
6	Engineering and Engineering-Related Technologies	90.9	66.6*
7	Engineering	90.2	85.6
8	Multi/Interdisciplinary Studies	88.0	73.7
9	Health Sciences	87.6	90.9
10	Foreign Languages	87.5	50.0
11	Business and Management	86.9	87.1
12	Allied Health	86.2	93.2
13	Mathematics	85.7	80.0
14	Life Sciences	84.4	75.0
15	Computer and Information Sciences	84.1	100.0*
-	All Graduates	80.2	78.0
16	Agricultural Sciences	80.0	66.6*
17	Law	79.5	NA
18	Library and Archival Sciences	79.3	61.1
19.5	Education	78.6	76.6
19.5	Physical Sciences	78.6	77.5
21	Theology	75.0*	66.7*
22	Psychology	74.0	76.0
23	Public Affairs	72.6	65.6
24	Letters	70.8	65.3
25	Communications	69.8	56.3
26	Social Sciences	67.3	62.6
27	Marketing and Distribution	57.1*	NA
28	Visual and Performing Arts	56.9	67.2
29	Renewable Natural Resources	55.6*	66.6*
30	Philosophy and Religion	38.5	40.0*
31	Liberal/General Studies	33.3*	100.0*
32	Home Economics	22.2	95.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

Master's Degree Graduates Employed Full-Time in Pennsylvania

Table 3.03 ranks the major disciplines of Table 3.0 according to the percentage of graduates with full-time employment who had found full-time employment in Pennsylvania. Most of these disciplines had a majority of their graduates finding full-time employment in Pennsylvania. Only six of the thirty-two discipline areas found in Table 3.03 had rates of Pennsylvania full-time employment that were at or below fifty percent, i.e., Liberal/General Studies, Agribusiness and Agricultural Production, Engineering, Philosophy and Religion, and Mathematics. Eight of the disciplines in Table 3.03 had seventy-five percent or more of their graduates finding full-time employment in Pennsylvania.

Unemployed Master's Degree Graduates in the Civilian Labor Market

While there was an overall pattern of the Master's degree graduates of 1984 being successful in finding full-time, degree-related employment, there were, nevertheless, some major discipline areas in Table 3.0 for which a substantial degree of unemployment was reported. Table 3.04, therefore, ranks the major disciplines of Table 3.0 according to the percentage of unemployment experienced by those 1984 graduates who had entered the Civilian Labor Market.

The findings of Table 3.04 indicate that the highest levels of unemployment were experienced by graduates in Home Economics, in Marketing and Distribution, Renewable Natural Resources, Philosophy and Religion, Library and Archival Sciences, Communication, and Psychology. These high rates of unemployment may be due in part to persistence in seeking full-time degree-related employment but the basic causes are, most probably, economic weakness, cutbacks in government funding, and the difficulties being experienced by the agriculture industry. The improvement in the general economy that has recently occurred has apparently resulted in an improvement in the rate of unemployment for 1984 graduates, i.e., from 7.3 percent in 1983 to 5.5 percent in 1983.

Master's Degree Graduates Pursuing an Advanced Degree

Typically, the master's degree is seen as a step toward the doctorate by graduates in many of these disciplines. As a result, the proportion going on for an advanced degree can be very high although the proportion can vary widely and some disciplines have very few going on for an advanced degree.

Table 3.05 ranks the disciplines of Table 3.0 according to the percentage of 1983-84 graduates going on for an advanced degree. It is interesting to note that the proportion going on for an advanced degree fell from 14.6 percent in 1983 to 9.8 percent in 1984 reflecting, possibly, an improved job market for master's degree graduates as indicated by the reversal of the downward trends in full-time and degree-related employment that had characterized these graduates.

TABLE 3.03

A RANK ORDERING OF MASTERS DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF FULL-TIME EMPLOYED 1983-84 GRADUATES WHO FOUND EMPLOYMENT IN PENNSYLVANIA

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
2	Area and Ethnic Studies	100.0*	100.0*
2	Marketing and Distribution	100.0*	NA
2	Parks and Recreation	100.0*	66.7*
4	Protective Services	96.3	100.0*
5	Engineering and Engineering-Related Technologies	80.0	50.0*
6	Education	79.2	77.8
7	Letters	79.1	76.9
8	Multi/Interdisciplinary Studies	76.0	62.5
9	Psychology	68.9	87.3
10	Law	68.8	NA
11	Allied Health	68.0	75.4
12	Public Affairs	67.2	61.3
13	Home Economics	66.7	33.3*
-	All Graduates	65.7	66.6
14	Communications	63.9	57.1
15	Health Sciences	63.3	77.5
16	Architecture and Environmental Design	60.0	40.0*
17	Life Sciences	57.5	56.8
18	Business and Management	57.4	57.5
19	Foreign Languages	57.1	58.3
20	Social Sciences	55.8	62.9
21	Agricultural Sciences	55.6	71.4*
22	Physical Sciences	52.8	44.4
23	Computer and Information Sciences	52.6	60.0*
25	Renewable Natural Resources	50.0*	66.7*
25	Library and Archival Sciences	50.0	66.7
25	Theology	50.0*	50.0*
27	Visual and Performing Arts	46.3	54.2
28	Mathematics	44.4	59.3
29	Philosophy and Religion	36.4	30.0*
30	Engineering	29.5	75.4
31.5	Agribusiness and Agricultural Production	0.0*	50.0*
31.5	Liberal/General Studies	0.0*	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED FULL-TIME EMPLOYED GRADUATES.

TABLE 3.04

A RANK ORDERING OF MASTERS DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1983-84 GRADUATES IN THE CIVILIAN MARKET

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Home Economics	55.6	25.0*
2	Marketing and Distribution	28.6*	NA
3	Renewable Natural Resources	22.2*	0.0*
4	Philosophy and Religion	15.4	0.0*
5	Library and Archival Sciences	13.8	22.2
6	Communications	11.6	12.5
7	Psychology	9.6	7.6
8	Mathematics	9.5	10.0
9	Visual and Performing Arts	9.2	4.7
10	Engineering and Engineering-Related Technologies	9.1	33.3*
11	Engineering	8.5	10.4
12	Letters	8.3	10.2
13	Allied Health	6.9	2.7
14	Computer and Information Sciences	6.8	0.0*
15	Business and Management	6.2	7.5
-	All Graduates	5.5	7.3
16	Health Sciences	4.8	3.9
17	Life Sciences	4.4	8.3
18	Education	4.0	6.5
19	Social Sciences	3.8	1.6
20	Public Affairs	2.7	6.9
21	Physical Sciences	1.8	10.0
22	Agribusiness and Agricultural Production	.0*	33.3*
27	Agricultural Sciences	.0	0.0*
27	Architecture and Environmental Design	.0	23.1
27	Area and Ethnic Studies	.0*	0.0*
27	Foreign Languages	.0	0.0
27	Law	.0	NA
27	Liberal/General Studies	.0*	0.0*
27	Multi/Interdisciplinary Studies	.0	10.5
27	Parks and Recreation	.0*	NA
27	Theology	.0*	0.0*
27	Protective Services	.0	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

TABLE 3.05

A RANK ORDERING OF MASTERS DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES PURSUING AN ADVANCED DEGREE

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Philosophy and Religion	44.8	44.4
2	Physical Sciences	40.4	37.3
3	Agricultural Sciences	38.9	25.0
4	Social Sciences	35.4	26.9
5	Mathematics	27.3	26.2
6	Psychology	25.8	24.3
7	Life Sciences	23.8	38.7
8	Engineering	20.9	30.4
9.5	Foreign Languages	18.2	20.0
9.5	Home Economics	18.2	28.6*
11	Computer and Information Sciences	15.4	73.7
12	Theology	11.1*	57.1*
13	Renewable Natural Resources	10.0*	62.5*
14	Visual and Performing Arts	9.3	5.8
15	Letters	8.6	18.0
16	Engineering and Engineering-Related Technologies	8.3	40.0*
17	Public Affairs	4.5	2.9
18	Education	4.3	6.0
19	Business and Management	4.2	7.1
20	Multi/Interdisciplinary Studies	3.4	4.8
21.5	Allied Health	3.3	1.3
21.5	Library and Archival Sciences	3.3	10.0
23	Health Sciences	1.8	15.1
28	Agribusiness and Agricultural Production	0.0*	40.0*
28	Architecture and Environmental Design	0.0	13.3
28	Area and Ethnic Studies	0.0*	25.0*
28	Marketing and Distribution	0.0*	NA
28	Communications	0.0	0.0
28	Law	0.0	NA
28	Liberal/General Studies	0.0*	75.0*
28	Parks and Recreation	0.0*	0.0*
28	Protective Services	0.0	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES.

Graduates in high ranking master's degree graduate disciplines are much more likely to find degree-related employment at the doctoral level than they are at the master's degree level since these fields are more typically seen as requiring the doctoral degree as the terminal degree for those professions that they are designed to serve.

DETAILED ANALYSES OF SELECTED MASTER'S DEGREE DISCIPLINES

As with the lower level graduates, many of the two-digit level categories of Table 3.0 are too generalized for the purposes of users of this report. A selection of major discipline areas from Table 3.0 has therefore been made and findings, at the more detailed four-digit and, in some instances, the six-digit levels of the CIP code, are presented below.

Results for Master's Degree Graduates in Agriculture and Renewable Natural Resources

Table 3.06 breaks out the Agriculture and the Renewable Natural Resources categories of Table 3.0 into more specific degree fields. Although a variety of analyses could be made of the data in Table 3.06 only two will be made here: (1) an analysis of full-time, degree-related Civilian Labor Market employment and (2) an analysis of the rate of full-time employment in Pennsylvania for full-time employed graduates.

In terms of full-time, degree-related, Civilian Labor Market employment, the rank order results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2	1	Agricultural Business and Management	100.0	66.6
2	2	Animal Sciences	100.0	0.0
2	3	Food Sciences	100.0	66.6
-	20	All Agriculture and Renewable Natural Resources Graduates	70.0	66.7
4	8	Renewable Natural Resources, General	62.5	50.0
5	5	Plant Sciences	60.0	100.0
6	1	Wildlife Management	0.0	100.0

While the number of graduates reported was low for all of the degree fields, the findings for Wild Life Management, Agricultural Business and Management, Animal Science, and Food Sciences must be treated with special caution since so few graduates were reported for these disciplines.

In terms of the proportion of full-time employed graduates who found employment in Pennsylvania, regardless of whether or not it was degree-related

TABLE 3.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN AGRICULTURE AND RENEWABLE NATURAL RESOURCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
AGRIBUSINESS AND AGRICULTURAL PRODUCTION											
AGRICULTURAL BUSINESS AND MANAGEMENT											
	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
*TOTAL AGRIBUSINESS AND AGRICULTURAL PRODUCTION											
		1	0	1	0	0	0	0	0	0	0
			.0	100.0	.0	.0	.0	.0	.0	.0	.0
		1	.0	100.0	.0	.0	.0	.0			
AGRICULTURAL SCIENCES											
ANIMAL SCIENCES											
	#	4	1	1	0	0	0	0	2	0	0
	%		25.0	25.0	.0	.0	.0	.0	50.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
FOOD SCIENCES											
	#	5	0	3	0	0	0	0	2	0	0
	%		.0	60.0	.0	.0	.0	.0	40.0	.0	.0
	%	3	.0	100.0	.0	.0	.0	.0			
PLANT SCIENCES											
	#	9	3	0	1	0	1	0	3	1	0
	%		33.3	.0	11.1	.0	11.1	.0	33.3	11.1	.0
	%	5	60.0	.0	20.0	.0	20.0	.0			
*TOTAL AGRICULTURAL SCIENCES											
		18	4	4	1	0	1	0	7	1	0
			22.2	22.2	5.6	.0	5.6	.0	38.9	5.6	.0
		10	40.0	40.0	10.0	.0	10.0	.0			

TABLE 3.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN AGRICULTURE AND RENEWABLE NATURAL RESOURCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED OTHER IN PA	EMPLOYED OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
RENEWABLE NATURAL RESOURCES											
RENEWABLE NATURAL RESOURCES, GENERAL											
	#	8	3	2	0	0	1	2	0	0	0
	%		37.5	25.0	.0	.0	12.5	25.0	.0	.0	.0
	%	8	37.5	25.0	.0	.0	12.5	25.0			
WILDLIFE MANAGEMENT											
	#	2	0	0	0	1	0	0	1	0	0
	%		.0	.0	.0	50.0	.0	.0	50.0	.0	.0
	%	1	.0	.0	.0	100.0	.0	.0			
*TOTAL RENEWABLE NATURAL RESOURCES		10	3	2	0	1	1	2	1	0	0
			30.0	20.0	.0	10.0	10.0	20.0	10.0	.0	.0
		9	33.3	22.2	.0	11.1	11.1	22.2			
TOTAL		29	7	7	1	1	2	2	8	1	0
			24.1	24.1	3.4	3.4	6.9	6.9	27.6	3.4	.0
		20	35.0	35.0	5.0	5.0	10.0	10.0			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

employment, the degree fields of Table 3.06 ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	4	Plant Sciences	100.0	75.0
2	5	Renewable Natural Resources, General	60.0	50.0
3	2	Animal Sciences	50.0	NA
-	16	All Agriculture and Renewable Natural Resources Graduates	50.0	66.7
5	3	Food Sciences	0.0	66.7
5	1	Agricultural Business and Management	0.0	50.0
5	1	Wildlife Management	0.0	100.0

Here again, while the number of reported graduates is generally low, the findings for Wildlife Management, Animal Sciences, Food Sciences, and Agricultural Business and Management graduates must be treated with special caution since so few graduates were reported for these disciplines.

Results for Master's Degree Graduates in Business, Marketing, and Management

Table 3.07 provides a more detailed breakout of the business-oriented disciplines of Table 3.0. These degree fields are ranked below according to the rate of full-time, degree-related, Civilian Labor Market employment.

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
3.5	12	Accounting	100.0	83.3
3.5	1	Insurance and Risk Management	100.0	NA
3.5	1	International Business Management	100.0	NA
3.5	11	Marketing Management and Research	100.0	100.0
3.5	2	Personnel Management	100.0	NA
3.5	4	Real Estate	100.0	NA
7	234	Business Administration and Management	91.9	88.1
-	520	All Business, Marketing, and Management Graduates	86.6	87.1
8	54	Banking and Finance	85.2	93.8
9	72	Labor/Industrial Relations	82.0	90.0
10	117	Business and Management, General	78.7	82.7
11	5	Management Science	60.0	NA
12	7	General Marketing	57.1	NA

The 1984 graduates in Business and Management had little difficulty finding degree-related employment when they entered the Civilian Labor Market. The exceptions were those degree fields whose graduates went on for an advanced degree rather than entering the Civilian Labor Market. This is probably because of the more scholarly nature of these degree fields, e.g., Management Science and Organizational Behavior.

TABLE 3.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BUSINESS AND MANAGEMENT											
BUSINESS AND MANAGEMENT, GENERAL											
	#	130	60	32	10	1	4	10	6	0	7
	%		46.2	24.6	7.7	.8	3.1	7.7	4.6	.0	5.4
	%	117	51.3	27.4	8.5	.9	3.4	8.5			
ACCOUNTING											
	#	12	11	1	0	0	0	0	0	0	0
	%		91.7	8.3	.0	.0	.0	.0	.0	.0	.0
	%	12	91.7	8.3	.0	.0	.0	.0			
BANKING AND FINANCE											
	#	58	39	7	4	0	0	4	1	0	3
	%		67.2	12.1	6.9	.0	.0	6.9	1.7	.0	5.2
	%	54	72.2	13.0	7.4	.0	.0	7.4			
BUSINESS ADMINISTRATION AND MANAGEMENT											
	#	243	70	145	8	2	0	9	6	1	2
	%		28.8	59.7	3.3	.8	.0	3.7	2.5	.4	.8
	%	234	29.9	62.0	3.4	.9	.0	3.8			
BUSINESS ECONOMICS											
	#	3	0	0	0	0	0	0	3	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
INSURANCE AND RISK MANAGEMENT											
	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
INTERNATIONAL BUSINESS MANAGEMENT											
	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			

TABLE 3.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BUSINESS AND MANAGEMENT											
LABOR/INDUSTRIAL RELATIONS											
	#	75	48	11	5	0	1	7	2	1	0
	%		64.0	14.7	6.7	.0	1.3	9.3	2.7	1.3	.0
	%	72	66.7	15.3	6.9	.0	1.4	9.7			
MANAGEMENT SCIENCE											
	#	7	3	0	0	0	0	2	2	0	0
	%		42.9	.0	.0	.0	.0	28.6	28.6	.0	.0
	%	5	60.0	.0	.0	.0	.0	40.0			
MARKETING MANAGEMENT AND RESEARCH											
	#	12	9	2	0	0	0	0	1	0	0
	%		75.0	16.7	.0	.0	.0	.0	8.3	.0	.0
	%	11	81.8	18.2	.0	.0	.0	.0			
ORGANIZATIONAL BEHAVIOR											
	#	2	0	0	0	0	0	0	2	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
PERSONNEL MANAGEMENT											
	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
REAL ESTATE											
	#	4	4	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	4	100.0	.0	.0	.0	.0	.0			
*TOTAL BUSINESS AND MANAGEMENT											
		550	246	200	27	3	5	32	23	2	12
			44.7	36.4	4.9	.5	.9	5.8	4.2	.4	2.2
		513	48.0	39.0	5.3	.6	1.0	6.2			

TABLE 3.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
MARKETING AND DISTRIBUTION											
GENERAL MARKETING	#	8	4	0	1	0	0	2	0	0	1
	%		50.0	.0	12.5	.0	.0	25.0	.0	.0	12.5
	%	7	57.1	.0	14.3	.0	.0	28.6			
*TOTAL MARKETING AND DISTRIBUTION		8	4	0	1	0	0	2	0	0	1
			50.0	.0	12.5	.0	.0	25.0	.0	.0	12.5
		7	57.1	.0	14.3	.0	.0	28.6			
TOTAL		558	250	200	28	3	5	34	23	2	13
			44.8	35.8	5.0	.5	.9	6.1	4.1	.4	2.3
		520	48.1	38.5	5.4	.6	1.0	6.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

When the proportion of full-time employed graduates who found full-time employment in Pennsylvania is considered, the degree fields of Table 3.07 rank as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2.5	1	Insurance Risk Management	100.0	NA
2.5	3	Management Science	100.0	NA
2.5	4	Real Estate	100.0	NA
2.5	5	General Marketing	100.0	NA
5	12	Accounting	91.7	83.9
6	50	Banking and Finance	86.0	80.0
7	64	Labor/Industrial Relations	82.8	55.5
8	11	Marketing Management and Research	81.8	100.0
9	103	Business and Management, General	68.0	66.7
-	481	All Business, Marketing, and Management Graduates	57.8	57.5
10	2	Personnel Management	50.0	NA
11	225	Business Administration and Management	34.7	47.2
12	1	International Business Management	0.0	NA

It is worth noting here that the disciplines in this list seem to be characterized, as a whole, by a relatively high level of degree-related Pennsylvania based employment and virtually no full-time employment that is not related to their degrees. If they are not employed full-time in a degree-related position, they tend to remain unemployed rather than seeking part-time work. Apparently, they persist in seeking degree-related, full-time employment despite the period of unemployment that might be required (see Table 3.07). The degree-fields of Business Economics and Organizational Behavior are not shown here since these graduates went on for a doctoral degree rather than entering the Civilian Labor Market.

Results for Master's Degree Graduates in Education

The major discipline of Education (Table 3.0) actually represents a large and diverse group of related specialties with varying degrees of labor market demand. For this reason, Table 3.08 has a large number of listed degree fields and the level of analysis used ranges from the four-digit level to the six-digit CIP code level in order to do justice to these specialties.

When the degree fields of Table 3.08 were ranked on the basis of the proportion of graduates in each discipline who found full-time, degree-related employment in the Civilian Labor Market the results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
6	7	Educational Media	100.0	NA
6	1	Evaluation and Research	100.0	100.0

TABLE 3.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
EDUCATION, GENERAL											
EDUCATION, GENERAL											
	#	49	32	2	7	0	4	2	2	0	0
	%		65.3	4.1	14.3	.0	8.2	4.1	4.1	.0	.0
	%	47	68.1	4.3	14.9	.0	8.5	4.3			
*TOTAL EDUCATION, GENERAL											
		49	32	2	7	0	4	2	2	0	0
			65.3	4.1	14.3	.0	8.2	4.1	4.1	.0	.0
		47	68.1	4.3	14.9	.0	8.5	4.3			
CURRICULUM AND INSTRUCTION											
CURRICULUM AND INSTRUCTION											
	#	18	11	2	0	1	1	0	3	0	0
	%		61.1	11.1	.0	5.6	5.6	.0	16.7	.0	.0
	%	15	73.3	13.3	.0	6.7	6.7	.0			
*TOTAL CURRICULUM AND INSTRUCTION											
		18	11	2	0	1	1	0	3	0	0
			61.1	11.1	.0	5.6	5.6	.0	16.7	.0	.0
		15	73.3	13.3	.0	6.7	6.7	.0			
EDUCATION ADMINISTRATION											
	#	35	19	3	8	2	1	0	1	0	1
	%		54.3	8.6	22.9	5.7	2.9	.0	2.9	.0	2.9
	%	33	57.6	9.1	24.2	6.1	3.0	.0			
*TOTAL EDUCATION ADMINISTRATION											
		35	19	3	8	2	1	0	1	0	1
			54.3	8.6	22.9	5.7	2.9	.0	2.9	.0	2.9
		33	57.6	9.1	24.2	6.1	3.0	.0			

TABLE 3.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
EDUCATIONAL MEDIA											
EDUCATIONAL MEDIA											
	#	7	6	1	0	0	0	0	0	0	0
	%		85.7	14.3	.0	.0	.0	.0	.0	.0	.0
	%	7	85.7	14.3	.0	.0	.0	.0			
*TOTAL EDUCATIONAL MEDIA											
		7	6	1	0	0	0	0	0	0	0
			85.7	14.3	.0	.0	.0	.0	.0	.0	.0
		7	85.7	14.3	.0	.0	.0	.0			
EVALUATION AND RESEARCH											
	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0		.0	.0	.0	.0			
*TOTAL EVALUATION AND RESEARCH											
		1	1	0	0	0	0	0	0	0	0
			100.0	.0	.0	.0	.0	.0	.0	.0	.0
		1	100.0		.0	.0	.0	.0			
SCHOOL PSYCHOLOGY											
SCHOOL PSYCHOLOGY											
	#	32	8	2	14	2	0	0	6	0	0
	%		25.0	6.3	43.8	6.3	.0	.0	18.8	.0	.0
	%	26	30.8	7.7	53.8	7.7	.0	.0			
*TOTAL SCHOOL PSYCHOLOGY											
		32	8	2	14	2	0	0	6	0	0
			25.0	6.3	43.8	6.3	.0	.0	18.8	.0	.0
		26	30.8	7.7	53.8	7.7	.0	.0			

TABLE 3.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
SPECIAL EDUCATION											
SPECIAL EDUCATION, GENERAL											
	#	106	67	21	2	2	0	5	5	0	4
	%		63.2	19.8	1.9	1.9	.0	4.7	4.7	.0	3.8
	%	97	69.1	21.6	2.1	2.1	.0	5.2			
EDUCATION OF THE DEAF AND HEARING IMPAIRED											
	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0		.0	.0	.0	.0			
EDUCATION OF THE GIFTED AND TALENTED											
	#	6	3	0	0	0	2	1	0	0	0
	%		50.0	.0	.0	.0	33.3	16.7	.0	.0	.0
	%	6	50.0		.0	.0	33.3	16.7			
EDUCATION OF THE MENTALLY HANDICAPPED											
	#	12	12	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	12	100.0		.0	.0	.0	.0			
SPECIFIC LEARNING DISABILITIES											
	#	2	2	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	2	100.0		.0	.0	.0	.0			
SPEECH CORRECTION											
	#	39	24	9	3	0	0	3	0	0	0
	%		61.5	23.1	7.7	.0	.0	7.7	.0	.0	.0
	%	39	61.5	23.1	7.7	.0	.0	7.7			
SPECIAL EDUCATION, OTHER											
	#	43	27	8	4	0	1	2	0	0	1
	%		62.8	18.6	9.3	.0	2.3	4.7	.0	.0	2.3
	%	42	64.3	19.0	9.5	.0	2.4	4.8			
*TOTAL SPECIAL EDUCATION											
		210	137	38	9	2	3	11	5	0	5
			65.2	18.1	4.3	1.0	1.4	5.2	2.4	.0	2.4
		200	68.5	19.0	4.5	1.0	1.5	5.5			

TABLE 3.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
STUDENT COUNSELING AND PERSONNEL SERVICES											
STUDENT COUNSELING AND PERSONNEL SERVICES											
	#	137	53	33	19	2	14	7	9	0	0
	%		38.7	24.1	13.9	1.5	10.2	5.1	6.6	.0	.0
	%	128	41.4	25.8	14.8	1.6	10.9	5.5			
ELEMENTARY SCHOOL COUNSELING											
	#	29	15	3	10	0	0	0	1	0	0
	%		51.7	10.3	34.5	.0	.0	.0	3.4	.0	.0
	%	28	53.6	10.7	35.7	.0	.0	.0			
SECONDARY SCHOOL COUNSELING											
	#	18	7	1	9	0	0	0	0	0	1
	%		38.9	5.6	50.0	.0	.0	.0	.0	.0	5.6
	%	17	41.2	5.9	52.9	.0	.0	.0			
*TOTAL STUDENT COUNSELING AND PERSONNEL SERVICES											
		184	75	37	38	2	14	7	10	0	1
			40.8	20.1	20.7	1.1	7.6	3.8	5.4	.0	.5
		173	43.4	21.4	22.0	1.2	8.1	4.0			
TEACHER EDUCATION, GENERAL PROGRAMS											
ADULT AND CONTINUING EDUCATION											
	#	21	14	4	1	0	1	0	1	0	0
	%		66.7	19.0	4.8	.0	4.8	.0	4.8	.0	.0
	%	20	70.0	20.0	5.0	.0	5.0	.0			
ELEMENTARY EDUCATION											
	#	127	85	14	5	2	7	4	6	0	4
	%		66.9	11.0	3.9	1.6	5.5	3.1	4.7	.0	3.1
	%	117	72.6	12.0	4.3	1.7	6.0	3.4			
PRE-ELEMENTARY EDUCATION											
	#	3	2	0	0	0	1	0	0	0	0
	%		66.7	.0	.0	.0	33.3	.0	.0	.0	.0
	%	3	66.7		.0	.0	33.3	.0			

TABLE 3.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TEACHER EDUCATION, GENERAL PROGRAMS											
SECONDARY EDUCATION	#	17	10	6	1	0	0	0	0	0	0
	%		58.8	35.3	5.9	.0	.0	.0	.0	.0	.0
	%	17	58.8	35.3	5.9	.0	.0	.0			
EARLY CHILDHOOD EDUCATION	#	4	4	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	4	100.0		.0	.0	.0	.0			
*TOTAL TEACHER EDUCATION, GENERAL PROGRAMS		172	115	24	7	2	9	4	7	0	4
			66.9	14.0	4.1	1.2	5.2	2.3	4.1	.0	2.3
		161	71.4	14.9	4.3	1.2	5.6	2.5			
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
AGRICULTURAL EDUCATION	#	3	1	0	1	0	0	0	1	0	0
	%		33.3	.0	33.3	.0	.0	.0	33.3	.0	.0
	%	2	50.0		50.0	.0	.0	.0			
ART EDUCATION	#	12	8	1	1	1	0	0	0	0	1
	%		66.7	8.3	8.3	8.3	.0	.0	.0	.0	8.3
	%	11	72.7	9.1	9.1	9.1	.0	.0			
BUSINESS EDUCATION	#	8	5	1	1	0	0	1	0	0	0
	%		62.5	12.5	12.5	.0	.0	12.5	.0	.0	.0
	%	8	62.5	12.5	12.5	.0	.0	12.5			
ENGLISH EDUCATION	#	3	2	1	0	0	0	0	0	0	0
	%		66.7	33.3	.0	.0	.0	.0	.0	.0	.0
	%	3	66.7	33.3	.0	.0	.0	.0			

TABLE 3.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
HEALTH EDUCATION	#	18	9	2	1	0	2	3	0	0	1
	%		50.0	11.1	5.6	.0	11.1	16.7	.0	.0	5.6
	%	17	52.9	11.8	5.9	.0	11.8	17.6			
HOME ECONOMICS EDUCATION	#	8	5	3	0	0	0	0	0	0	0
	%		62.5	37.5	.0	.0	.0	.0	.0	.0	.0
	%	8	62.5	37.5	.0	.0	.0	.0			
INDUSTRIAL ARTS EDUCATION	#	11	11	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	11	100.0		.0	.0	.0	.0			
MATHEMATICS EDUCATION	#	9	6	2	0	0	0	0	1	0	0
	%		66.7	22.2	.0	.0	.0	.0	11.1	.0	.0
	%	8	75.0	25.0	.0	.0	.0	.0			
MUSIC EDUCATION	#	24	8	12	0	0	3	1	0	0	0
	%		33.3	50.0	.0	.0	12.5	4.2	.0	.0	.0
	%	24	33.3	50.0	.0	.0	12.5	4.2			
PHYSICAL EDUCATION	#	35	11	16	1	0	0	3	1	0	3
	%		31.4	45.7	2.9	.0	.0	8.6	2.9	.0	8.6
	%	31	35.5	51.6	3.2	.0	.0	9.7			
READING EDUCATION	#	102	63	12	9	1	6	2	3	0	6
	%		61.8	11.8	8.8	1.0	5.9	2.0	2.9	.0	5.9
	%	93	67.7	12.9	9.7	1.1	6.5	2.2			

TABLE 3.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
SCIENCE EDUCATION											
	#	15	11	1	1	0	0	1	1	0	0
	%		73.3	6.7	6.7	.0	.0	6.7	6.7	.0	.0
	%	14	78.6	7.1	7.1	.0	.0	7.1			
SOCIAL STUDIES EDUCATION											
	#	2	0	0	1	0	0	0	0	0	1
	%		.0	.0	50.0	.0	.0	.0	.0	.0	50.0
	%	1	.0		100.0	.0	.0	.0			
TRADE AND INDUSTRIAL EDUCATION											
	#	6	4	0	0	0	0	1	0	0	1
	%		66.7	.0	.0	.0	.0	16.7	.0	.0	16.7
	%	5	80.0		.0	.0	.0	20.0			
PHYSICS/MATH											
	#	4	4	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	4	100.0		.0	.0	.0	.0			
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS, OTHER											
	#	5	3	0	2	0	0	0	0	0	0
	%		60.0	.0	40.0	.0	.0	.0	.0	.0	.0
	%	5	60.0		40.0	.0	.0	.0			
*TOTAL TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
		265	151	51	18	2	11	12	7	0	13
			57.0	19.2	6.8	.8	4.2	4.5	2.6	.0	4.9
		245	61.6	20.8	7.3	.8	4.5	4.9			
TEACHING ENGLISH AS A SECOND LANGUAGE/FOREIGN LANGUAGE											
TEACHING ENGLISH AS A SECOND LANGUAGE/FOREIGN LANGUAGE											
	#	1	0	0	0	0	0	0	1	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0		.0	.0	.0	.0			

TABLE 3.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
*TOTAL TEACHING ENGLISH AS A SECOND LANGUAGE/FOREIGN LANGUAGE											
		1	0	0	0	0	0	0	1	0	0
			.0	.0	.0	.0	.0	.0	100.0	.0	.0
		0	.0		.0	.0	.0	.0			
EDUCATION, OTHER											
EDUCATION, OTHER											
	#	3	1	0	0	0	2	0	0	0	0
	%		33.3	.0	.0	.0	66.7	.0	.0	.0	.0
	%	3	33.3		.0	.0	66.7	.0			
*TOTAL EDUCATION, OTHER											
		3	1	0	0	0	2	0	0	0	0
			33.3	.0	.0	.0	66.7	.0	.0	.0	.0
		3	33.3		.0	.0	66.7	.0			
TOTAL											
		977	556	160	101	13	45	36	42	0	24
			56.9	16.4	10.3	1.3	4.6	3.7	4.3	.0	2.5
		911	61.0	17.6	11.1	1.4	4.9	4.0			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

6	2	Education of the Deaf and Hearing Impaired	100.0	50.0
6	12	Education of the Mentally Handicapped	100.0	100.0
6	2	Specific Learning Disabilities	100.0	100.0
6	4	Early Childhood Education	100.0	NA
6	3	English Education	100.0	100.0
6	8	Home Economics Education	100.0	76.9
6	11	Industrial Arts Education	100.0	84.6
6	8	Mathematics Education	100.0	100.0
6	4	Physics/Mathematics Education	100.0	100.0
12	17	Secondary Education	94.1	100.0
13	97	Special Education, General	90.7	96.7
14	20	Adult and Continuing Education	90.0	NA
15	31	Physical Education	87.1	66.7
16	15	Curriculum and Instruction	86.6	62.5
17	14	Science Education	85.7	60.0
18.5	39	Speech Correction	84.6	83.8
18.5	117	Elementary Education	84.6	90.9
20.5	42	Special Education, Other	83.3	91.0
20.5	24	Music Education	83.3	78.6
22	11	Art Education	81.8	88.9
23	93	Reading Education	80.6	75.7
24	5	Trade and Industrial Arts Education	80.0	50.0
-	911	All Education Graduates	78.6	76.6
25	8	Business Education	75.0	100.0
26	47	Education, General	72.4	96.7
27	128	Student Counseling and Personnel Services	67.2	52.2
28.5	33	Education Administration	66.7	68.0
28.5	3	Pre-Elementary Education	66.7	NA
30	17	Health Education	64.7	33.3
31	28	Elementary School Counseling	64.3	NA
32	5	Teacher Education, Specific Subject Area, Other	60.0	100.0
33.5	6	Education of the Gifted and Talented	50.0	NA
33.5	2	Agricultural Education	50.0	88.9
35	17	Secondary School Counseling	47.1	NA
36	26	School Psychology	38.5	59.2
37	3	Education, Other	33.3	NA
38	1	Social Studies Education	0.0	100.0

It is noteworthy that twenty-nine of the thirty-eight ranked fields had at least sixty-five percent of their graduates finding degree-related employment when they entered the Civilian Labor Market. Only graduates in the areas of Secondary School Counseling, School Psychology, Social Studies Education, and Education, Other had less than fifty percent finding such employment.

The rankings for these degree fields must be interpreted with caution since many of these degree fields had relatively few graduates in the Civilian Labor Market.

When the Education degree fields were ranked according to the proportion of full-time employed graduates finding employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
7.5	1	Evaluation and Research	100.0	50.0
7.5	2	Education of the Deaf and Hearing Impaired	100.0	50.0
7.5	3	Education of Gifted and Talented	100.0	NA
7.5	12	Education of the Mentally Handicapped	100.0	70.0
7.5	2	Specific Learning Disabilities	100.0	100.0
7.5	2	Pre-elementary Education	100.0	NA
7.5	4	Early Childhood Education	100.0	NA
7.5	2	Agricultural Education	100.0	100.0
7.5	11	Industrial Arts Education	100.0	91.7
7.5	1	Social Studies Education	100.0	100.0
7.5	4	Trade and Industrial Arts Education	100.0	100.0
7.5	4	Physics/Math Education	100.0	100.0
7.5	5	Teacher Education, Specific Subject Areas, Other	100.0	0.0
7.5	1	Education, Other	100.0	NA
15	41	Education, General	95.1	71.4
16	17	Secondary School Counseling	94.1	NA
17	13	Science Education	92.3	75.0
18	28	Elementary School Counseling	89.3	NA
19.5	7	Educational Media	85.7	NA
19.5	7	Business Education	85.7	66.7
21	106	Elementary Education	84.9	76.4
22	85	Reading Education	84.7	85.9
23	26	School Psychology	84.6	83.3
24	32	Educational Administration	84.4	61.9
25	12	Health Education	83.3	75.0
26	11	Art Education	81.8	87.5
27	39	Special Education, Other	79.5	51.6
-	830	All Education Graduates	79.2	77.8
28	19	Adult and Continuing Education	78.9	NA
29	14	Curriculum and Instruction	78.6	86.7
31	92	Special Education, General	75.0	71.2
31	36	Speech Correction	75.0	65.4
31	8	Mathematics Education	75.0	100.0
33	107	Student Counseling and Personnel Services	67.3	88.7
34	3	English Education	66.7	100.0
35	17	Secondary Education	64.7	54.5
36	8	Home Economics Education	62.5	90.0
37	28	Physical Education	42.9	62.5
38	20	Music Education	40.0	83.3

The lower ranked degree fields of this listing seem to be those for which a strong National Labor Market rather than a strong Pennsylvania Labor Market can be reasonably assumed to exist.

Results for Master's Degree Graduates in Engineering

Table 3.09 gives a breakout of various Engineering degree fields within the major discipline of Engineering found in Table 3.0.

When the degree fields of Engineering were ranked with regard to the proportion of 1984 master's degree graduates in the Civilian Labor Market who found full-time, degree-related employment, these degree fields ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
4.5	1	Aerospace, Aeronautical and Astronautical Engineering	100.0	100.0
4.5	1	Architectural Engineering	100.0	100.0
4.5	1	Bioengineering and Biomedical Engineering	100.0	50.0
4.5	29	Electrical, Electronics and Communications Engineering	100.0	100.0
4.5	2	Engineering Mechanics	100.0	100.0
4.5	2	Environmental Health Engineering	100.0	NA
4.5	1	Materials Engineering	100.0	25.0
4.5	2	Petroleum Engineering	100.0	100.0
9	29	Mechanical Engineering	96.6	100.0
10	11	Engineering Science	91.0	92.9
-	164	All Engineering Graduates	90.2	85.6
11	30	Chemical Engineering	90.0	82.3
12	19	Civil Engineering	89.5	100.0
13	13	Industrial Engineering	84.6	71.5
14	5	Ceramic Engineering	80.0	100.0
15	13	Metallurgical Engineering	69.2	33.3
16	3	Nuclear Engineering	66.7	100.0
17	2	Agricultural Engineering	50.0	20.0

The rankings should be used with caution because of the low number of graduates in many of these disciplines. The general findings are, however, no surprise. Engineering graduates, as a whole, have not had difficulty finding degree-related employment. The exceptions in this listing are, therefore, noteworthy, i.e.; Agricultural Engineering, Nuclear Engineering, and Metallurgical Engineering. These are degree fields where there apparently was little demand relative to the supply of graduates available.

A glance at Table 3.09 reveals that, with few exceptions, the labor market for engineers is a national or even an international market with relatively few engineers finding full-time employment in Pennsylvania. When the degree fields of Table 3.09 were ranked with regard to the proportion of master's degree graduates in engineering who found full-time employment in Pennsylvania, the results were:

TABLE 3.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR MASTER"S DEGREE GRADUATES IN ENGINEERING, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
AEROSPACE, AERONAUTICAL, AND ASTRONAUTICAL ENGINEERING											
	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
AGRICULTURAL ENGINEERING											
	#	3	1	0	0	0	0	1	1	0	0
	%		33.3	.0	.0	.0	.0	33.3	33.3	.0	.0
	%	2	50.0	.0	.0	.0	.0	50.0			
ARCHITECTURAL ENGINEERING											
	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
BIOENGINEERING AND BIOMEDICAL ENGINEERING											
	#	5	0	1	0	0	0	0	4	0	0
	%		.0	20.0	.0	.0	.0	.0	80.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
CERAMIC ENGINEERING											
	#	7	0	4	0	0	0	1	2	0	0
	%		.0	57.1	.0	.0	.0	14.3	28.6	.0	.0
	%	5	.0	80.0	.0	.0	.0	20.0			
CHEMICAL ENGINEERING											
	#	39	12	15	0	0	0	3	6	2	1
	%		30.8	38.5	.0	.0	.0	7.7	15.4	5.1	2.6
	%	30	40.0	50.0	.0	.0	.0	10.0			
CIVIL ENGINEERING											
	#	27	4	13	0	0	0	2	5	1	2
	%		14.8	48.1	.0	.0	.0	7.4	18.5	3.7	7.4
	%	19	21.1	68.4	.0	.0	.0	10.5			
ELECTRICAL, ELECTRONICS, AND COMMUNICATIONS ENGINEERING											
	#	42	3	26	0	0	0	0	12	0	1
	%		7.1	61.9	.0	.0	.0	.0	28.6	.0	2.4
	%	29	10.3	89.7	.0	.0	.0	.0			

TABLE 3.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR MASTER"S DEGREE GRADUATES IN ENGINEERING, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
ENGINEERING MECHANICS	#	2	0	2	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
ENGINEERING SCIENCE	#	12	5	5	1	0	0	0	1	0	0
	%		41.7	41.7	8.3	.0	.0	.0	8.3	.0	.0
	%	11	45.5	45.5	9.1	.0	.0	.0			
ENVIRONMENTAL HEALTH ENGINEERING	#	3	2	0	0	0	0	0	1	0	0
	%		66.7	.0	.0	.0	.0	.0	33.3	.0	.0
	%	2	100.0	.0	.0	.0	.0	.0			
INDUSTRIAL ENGINEERING	#	20	2	9	0	0	0	2	2	1	4
	%		10.0	45.0	.0	.0	.0	10.0	10.0	5.0	20.0
	%	13	15.4	69.2	.0	.0	.0	15.4			
MATERIALS ENGINEERING	#	3	0	1	0	0	0	0	2	0	0
	%		.0	33.3	.0	.0	.0	.0	66.7	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
MECHANICAL ENGINEERING	#	38	12	16	0	0	0	1	4	0	5
	%		31.6	42.1	.0	.0	.0	2.6	10.5	.0	13.2
	%	29	41.4	55.2	.0	.0	.0	3.4			
METALLURGICAL ENGINEERING	#	21	0	9	0	0	0	4	8	0	0
	%		.0	42.9	.0	.0	.0	19.0	38.1	.0	.0
	%	13	.0	69.2	.0	.0	.0	30.8			
NUCLEAR ENGINEERING	#	4	2	0	0	0	1	0	0	1	0
	%		50.0	.0	.0	.0	25.0	.0	.0	25.0	.0
	%	3	66.7	.0	.0	.0	33.3	.0			

TABLE 3.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR MASTER"S DEGREE GRADUATES IN ENGINEERING, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
PETROLEUM ENGINEERING	#	2	0	2	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
TOTAL		230	43	105	1	0	1	14	48	5	13
			18.7	45.7	.4	.0	.4	6.1	20.9	2.2	5.7
		164	26.2	64.0	.6	.0	.6	8.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2	1	Agricultural Engineering	100.0	0.0
2	2	Environmental Health Engineering	100.0	NA
2	2	Nuclear Engineering	100.0	77.8
4	11	Engineering Science	54.5	71.4
5	6	Chemical Engineering	44.4	33.3
6	28	Mechanical Engineering	42.9	47.6
-	149	All Engineering Graduates	29.5	43.8
7	17	Civil Engineering	23.5	38.9
8	11	Industrial Engineering	18.2	50.0
9	29	Electrical, Electronic, and Communications Engineering	10.3	50.0
13.5	1	Aerospace, Aeronautical and Astronautical Engineering	0.0	0.0
13.5	1	Architectural Engineering	0.0	0.0
13.5	1	Bioengineering and Biomedical Engineering	0.0	0.0
13.5	4	Ceramic Engineering	0.0	33.3
13.5	2	Engineering Mechanics	0.0	100.0
13.5	1	Materials Engineering	0.0	0.0
13.5	9	Metallurgical Engineering	0.0	50.0
13.5	2	Petroleum Engineering	0.0	0.0

Results for Master's Degree Graduates in the Engineering and Engineering-Related Technologies

Although the engineering and engineering-related technologies, at the master's degree level, are not a major part of the higher education curriculum, Table 3.10 indicates that Pennsylvania institutions do graduate some individuals with degrees in the areas of Environmental Control Technologies and of Miscellaneous Engineering-Related Technologies, Other. The employment picture found in Table 3.10 is much more positive than that for the previous year where fifty percent of the Environmental Control graduates were unemployed.

Results for Master's Degree Graduates in the Allied Health Professions

Table 3.11 breaks out the degree fields contained in the major discipline area of Allied Health found to Table 3.0. The most striking feature of Table 3.11 is a relative lack of employment that is not degree-related and a strong tendency to find degree-related employment in Pennsylvania. Art Therapy (25%) and Manual Arts Therapy (0.0%) were the only exceptions to this strong trend to Pennsylvania based employment with Habilitative Services also being somewhat weak in this regard (66.7%).

When ranked according to the proportion finding full-time, degree-related employment in the Civilian Labor Market, the following results were obtained:

TABLE 3.10

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE HELD FOR MASTER"S DEGREE GRADUATES IN THE ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
ENVIRONMENTAL CONTROL TECHNOLOGIES	#	7	6	0	0	0	0	1	0	0	0
	%		85.7	.0	.0	.0	.0	14.3	.0	.0	.0
	%	7	85.7	.0	.0	.0	.0	14.3			
ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES, OTHER	#	5	2	2	0	0	0	0	1	0	0
	%		40.0	40.0	.0	.0	.0	.0	20.0	.0	.0
	%	4	50.0	50.0	.0	.0	.0	.0			
TOTAL		12	8	2	0	0	0	1	1	0	0
			66.7	16.7	.0	.0	.0	8.3	8.3	.0	.0
		11	72.7	18.2	.0	.0	.0	9.1			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 3.11

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN THE ALLIED HEALTH PROFESSIONS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
REHABILITATION COUNSELING	#	16	12	3	0	0	0	1	0	0	0
	%		75.0	18.8	.0	.0	.0	6.3	.0	.0	.0
	%	16	75.0	18.8	.0	.0	.0	6.3			
HABILITATIVE SERVICES	#	5	2	1	0	0	1	1	0	0	0
	%		40.0	20.0	.0	.0	20.0	20.0	.0	.0	.0
	%	5	40.0	20.0	.0	.0	20.0	20.0			
ART THERAPY	#	4	1	3	0	0	0	0	0	0	0
	%		25.0	75.0	.0	.0	.0	.0	.0	.0	.0
	%	4	25.0	75.0	.0	.0	.0	.0			
MANUAL ARTS THERAPY	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
PHYSICAL THERAPY	#	4	2	0	0	0	1	0	1	0	0
	%		50.0	.0	.0	.0	25.0	.0	25.0	.0	.0
	%	3	66.7	.0	.0	.0	33.3	.0			
TOTAL		30	17	8	0	0	2	2	1	0	0
			56.7	26.7	.0	.0	6.7	6.7	3.3	.0	.0
		29	58.6	27.6	.0	.0	6.9	6.9			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	4	Art Therapy	100.0	95.0
1.5	1	Manual Arts Therapy	100.0	NA
3	16	Rehabilitation Counseling	93.8	91.7
-	29	All Allied Health Graduates	86.2	93.2
4	3	Physical Therapy	66.7	NA
5	5	Habilitative Services	60.0	NA

When ranked according to the proportion of full-time employed graduates obtaining full-time employment in Pennsylvania, they ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	2	Physical Therapy	100.0	NA
2	15	Rehabilitation Counseling	80.0	81.8
-	25	All Allied Health Graduates	68.0	75.4
3	3	Habilitative Services	66.7	NA
4	4	Art Therapy	25.0	73.7
5	1	Manual Arts Therapy	0.0	NA

Results for Master's Degree Graduates in the Health Sciences

Table 3.12 breaks out the Health Sciences category of Table 3.0. It gives postgraduate activity distributions for specific health science areas such as: Nursing, Audiology and Speech Pathology, etc. Here again, there is a pattern of a high level of degree-related, full-time employment. When these graduates did enter the Civilian Labor Market it is apparent that they also tended to find degree-related, full-time employment that is located in Pennsylvania.

When the degree fields of Table 3.12 were ranked as to the proportion obtaining degree-related full-time employment in the Civilian Labor Market, the results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2	1	Basic Clinical Health Sciences	100.0	100.0
2	6	Pharmacy	100.0	100.0
2	1	Health Sciences Administration	100.0	NA
4	25	Nursing	88.0	95.7
-	105	All Health Science Graduates	87.6	80.9
5	47	Audiology and Speech Pathology	87.2	73.6
6	7	Toxicology (Clinical)	71.4	NA

TABLE 3.12

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR MASTER"S DEGREE GRADUATES IN THE HEALTH SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
AUDIOLOGY AND SPEECH PATHOLOGY	#	49	19	22	2	1	0	3	1	0	1
	%		38.8	44.9	4.1	2.0	.0	6.1	2.0	.0	2.0
	%	47	40.4	46.8	4.3	2.1	.0	6.4			
BASIC CLINICAL HEALTH SCIENCES	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
HEALTH SERVICES ADMINISTRATION	#	20	14	3	0	0	1	1	0	1	0
	%		70.0	15.0	.0	.0	5.0	5.0	.0	5.0	.0
	%	19	73.7	15.8	.0	.0	5.3	5.3			
NURSING	#	26	20	2	1	0	1	1	1	0	0
	%		76.9	7.7	3.8	.0	3.8	3.8	3.8	.0	.0
	%	25	80.0	8.0	4.0	.0	4.0	4.0			
PHARMACY	#	6	4	2	0	0	0	0	0	0	0
	%		66.7	33.3	.0	.0	.0	.0	.0	.0	.0
	%	6	66.7	33.3	.0	.0	.0	.0			
TOXICOLOGY(CLINICAL)	#	7	0	5	2	0	0	0	0	0	0
	%		.0	71.4	28.6	.0	.0	.0	.0	.0	.0
	%	7	.0	71.4	28.6	.0	.0	.0			
TOTAL		109	57	35	5	1	2	5	2	1	1
			52.3	32.1	4.6	.9	1.8	4.6	1.8	.9	.9
		105	54.3	33.3	4.8	1.0	1.9	4.8			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

When ranked according to the proportion of full-time employed graduates finding full-time employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	23	Nursing	91.3	88.6
2	17	Health Sciences Administration	82.4	NA
3	6	Pharmacy	66.7	0.0
-	105	All Health Science Graduates	63.3	77.5
4	44	Audiology and Speech Pathology	47.7	60.0
5	7	Toxicology (Clinical)	28.6	NA
6	1	Basic Clinical Health Sciences	0.0	75.0

Caution should be exercised in evaluating the findings for graduates in Toxicology, Pharmacy and Basic Clinical Health Sciences, because of the small number of graduates reported in these degree fields.

Results for Master's Degree Graduates in the Physical Sciences

Table 3.13 breaks out specific degree fields from the Physical Science category of Table 3.0. Inspection of this table indicates that for many of these degree fields the master's degree is not seen as the terminal degree for employment in that field. As a result, substantial proportions of these graduates go on to course work leading to an advanced degree, e.g., graduates in Astronomy, Chemistry, and Physics.

When the degree fields of Table 3.13 were ranked according to the proportion of master's degree graduates finding full-time, degree-related employment in the Civilian Labor Market, the following ranking of these physical sciences resulted:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	1	Physical Sciences, General	100.0	NA
1.5	1	Astronomy	100.0	NA
3	16	Chemistry	93.8	90.0
4	7	Atmospheric Sciences and Meteorology	85.7	100.0
5	5	Physics	80.0	50.0
-	56	All Physical Science Graduates	78.6	77.5
6	12	Geological Sciences	75.0	100.0
7	3	Physical Sciences, Other	66.7	25.0
8	11	Miscellaneous Physical Sciences	54.5	62.5

As might be expected, graduates in Physics and Chemistry tended to typically go on for an advanced degree.

TABLE 3.13

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR MASTER"S DEGREE GRADUATES IN THE PHYSICAL SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
PHYSICAL SCIENCES, GENERAL	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
ASTRONOMY	#	2	0	1	0	0	0	0	1	0	0
	%		.0	50.0	.0	.0	.0	.0	50.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
ATMOSPHERIC SCIENCES AND METEOROLOGY	#	8	1	5	1	0	0	0	1	0	0
	%		12.5	62.5	12.5	.0	.0	.0	12.5	.0	.0
	%	7	14.3	71.4	14.3	.0	.0	.0			
CHEMISTRY	#	30	8	7	1	0	0	0	14	0	0
	%		26.7	23.3	3.3	.0	.0	.0	46.7	.0	.0
	%	16	50.0	43.8	6.3	.0	.0	.0			
GEOLOGICAL SCIENCES	#	15	3	6	1	1	1	0	3	0	0
	%		20.0	40.0	6.7	6.7	6.7	.0	20.0	.0	.0
	%	12	25.0	50.0	8.3	8.3	8.3	.0			
MISCELLANEOUS PHYSICAL SCIENCES	#	11	6	0	3	0	1	1	0	0	0
	%		54.5	.0	27.3	.0	9.1	9.1	.0	.0	.0
	%	11	54.5	.0	27.3	.0	9.1	9.1			
PHYSICS	#	20	3	1	0	1	0	0	15	0	0
	%		15.0	5.0	.0	5.0	.0	.0	75.0	.0	.0
	%	5	60.0	20.0	.0	20.0	.0	.0			
PHYSICAL SCIENCES, OTHER	#	7	0	2	0	1	0	0	4	0	0
	%		.0	28.6	.0	14.3	.0	.0	57.1	.0	.0
	%	3	.0	66.7	.0	33.3	.0	.0			

TABLE 3.13

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR MASTER"S DEGREE GRADUATES IN THE PHYSICAL SCIENCES, 1984

	TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TOTAL										
	94	22	22	6	3	2	1	38	0	0
		23.4	23.4	6.4	3.2	2.1	1.1	40.4	.0	.0
	56	39.3	39.3	10.7	5.4	3.6	1.8			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

When the Physical Science degree fields were ranked with regard to the proportion of full-time employed graduates finding full-time employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	1	Physical Sciences, General	100.0	NA
1.5	9	Miscellaneous Physical Sciences	100.0	75.0
3	5	Physics	60.0	50.0
4	16	Chemistry	56.3	50.0
-	53	All Physical Science Graduates	52.8	44.4
5	11	Geological Sciences	36.4	0.0
6	7	Atmospheric Sciences and Meteorology	28.6	0.0
7.5	1	Astronomy	0.0	NA
7.5	3	Physical Sciences, Other	0.0	0.0

It should also be noted that, in contrast to 1983, these graduates tended to find employment that was degree-related. The overall picture is, moreover, one of increased Pennsylvania based labor market demand in 1984.

Results for Master's Degree Graduates in Psychology

It is only at the graduate level that the discipline of Psychology becomes truly differentiated as to area of specialization. It is for this reason that no attempt was made to break out this major discipline at the baccalaureate level. Table 3.14 gives the postgraduate activity distributions for various areas of specialization within the major discipline of Psychology at the master's degree level but, even here, the degree of specialization is still relatively limited.

When the degree fields of Table 3.14 were ranked according to the proportion of master's degree graduates finding full-time, degree-related employment in the Civilian Labor Market the following ranking resulted.

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	3	Clinical Psychology	100.0	100.0
1.5	7	Psychology, Other	100.0	94.4
3	12	Community Psychology	91.7	50.0
4	4	Counseling Psychology	75.0	NA
-	73	All Psychology Graduates	73.9	76.0
5	34	Psychology, General	67.7	68.8
6	11	Psychological Studies Unique to Pennsylvania	54.5	NA
7	2	Social Psychology	50.0	50.0

It should be noted that 40.3 percent of the General Psychology and 25 percent of the Clinical Psychology graduates went on to obtain an advanced degree. Apparently, most of these graduates find degree-related employment when they enter the Civilian Labor Market.

TABLE 3.14

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR MASTER"S DEGREE GRADUATES IN PYSCHOLOGY, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
PSYCHOLOGY, GENERAL	#	72	16	7	1	3	5	2	29	0	9
	%		22.2	9.7	1.4	4.2	6.9	2.8	40.3	.0	12.5
	%	34	47.1	20.6	2.9	8.8	14.7	5.9			
CLINICAL PSYCHOLOGY	#	4	1	2	0	0	0	0	1	0	0
	%		25.0	50.0	.0	.0	.0	.0	25.0	.0	.0
	%	3	33.3	66.7	.0	.0	.0	.0			
COMMUNITY PSYCHOLOGY	#	14	9	2	0	0	0	1	2	0	0
	%		64.3	14.3	.0	.0	.0	7.1	14.3	.0	.0
	%	12	75.0	16.7	.0	.0	.0	8.3			
COUNSELING PSYCHOLOGY	#	9	3	0	0	0	0	1	0	0	5
	%		33.3	.0	.0	.0	.0	11.1	.0	.0	55.6
	%	4	75.0	.0	.0	.0	.0	25.0			
SOCIAL PSYCHOLOGY	#	2	1	0	1	0	0	0	0	0	0
	%		50.0	.0	50.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	.0	50.0	.0	.0	.0			
PSYCHOLOGY STUDIES UNIQUE TO PENNSYLVANIA	#	16	6	0	1	1	0	3	0	0	5
	%		37.5	.0	6.3	6.3	.0	18.8	.0	.0	31.3
	%	11	54.5	.0	9.1	9.1	.0	27.3			
PSYCHOLOGY, OTHER	#	7	3	4	0	0	0	0	0	0	0
	%		42.9	57.1	.0	.0	.0	.0	.0	.0	.0
	%	7	42.9	57.1	.0	.0	.0	.0			
TOTAL		124	39	15	3	4	5	7	32	0	19
			31.5	12.1	2.4	3.2	4.0	5.6	25.8	.0	15.3
		73	53.4	20.5	4.1	5.5	6.8	9.6			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

When ranked as to the proportion of full-time employed graduates obtaining employment in Pennsylvania, the results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1.5	2	Counseling Psychology	100.0	NA
1.5	2	Social Psychology	100.0	66.7
3	8	Psychological Studies Unique to Pennsylvania	87.5	NA
4	11	Community Psychology	81.8	50.0
-	61	All Psychology Graduates	68.9	87.3
5	27	Psychology, General	63.0	76.6
6	7	Psychology, Other	42.9	100.0
7	3	Clinical Psychology	33.3	100.0

The results indicate an overall marked shift in 1984 away from Pennsylvania based employment, with the exceptions of Social Psychology and Community Psychology, when compared with the prior year of 1983.

Results for Master's Degree Graduates in the Social Sciences

Table 3.15 breaks out the specific degree fields within the major discipline category of Social Sciences that is found in Table 3.0.

When the Social Science degree fields of Table 3.15 were ranked according to the proportion of graduates in the civilian labor market who found full-time, degree-related employment the results were as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2.5	1	Social Sciences, General	100.0	66.7
2.5	1	Criminology	100.0	50.0
2.5	2	Political Science and Government	100.0	68.2
2.5	1	Urban Studies	100.0	NA
5	5	Economics	80.0	33.3
6	13	Geography	77.0	57.1
-	52	All Social Science Graduates	67.3	62.6
7	19	History	57.9	57.9
8	8	Sociology	37.5	57.2

The pattern here is one of more than half (67.3%) of these graduates finding degree-related employment compared with 1983 where 62.6 percent found such employment. Only the degree field of Sociology had more than half of its graduates failing to find degree-related employment.

TABLE 3.15

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR MASTER"S DEGREE GRADUATES IN THE SOCIAL SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
SOCIAL SCIENCES, GENERAL	#	3	3	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	3	100.0	.0	.0	.0	.0				
ANTHROPOLOGY	#	2	0	0	0	0	0	0	2	0	0
	%		.0	.0	.0	.0	.0	.0	100.0	.0	.0
	%	0	.0	.0	.0	.0	.0				
CRIMINOLOGY	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
ECONOMICS	#	7	2	2	0	0	1	0	2	0	0
	%		28.6	28.6	.0	.0	14.3	.0	28.6	.0	.0
	%	5	40.0	40.0	.0	.0	20.0	.0			
GEOGRAPHY	#	14	5	5	1	0	1	1	1	0	0
	%		35.7	35.7	7.1	.0	7.1	7.1	7.1	.0	.0
	%	13	38.5	38.5	7.7	.0	7.7	7.7			
HISTORY	#	32	6	5	2	2	3	1	13	0	0
	%		18.8	15.6	6.3	6.3	9.4	3.1	40.6	.0	.0
	%	19	31.6	26.3	10.5	10.5	15.8	5.3			
POLITICAL SCIENCE AND GOVERNMENT	#	6	2	0	0	0	0	0	3	0	1
	%		33.3	.0	.0	.0	.0	.0	50.0	.0	16.7
	%	2	100.0	.0	.0	.0	.0	.0			
SOCIOLOGY	#	16	2	1	0	3	2	0	8	0	0
	%		12.5	6.3	.0	18.8	12.5	.0	50.0	.0	.0
	%	8	25.0	12.5	.0	37.5	25.0	.0			

TABLE 3.15

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR MASTER"S DEGREE GRADUATES IN THE SOCIAL SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
URBAN STUDIES	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
TOTAL		82	21	14	3	5	7	2	29	0	1
			25.6	17.1	3.7	6.1	8.5	2.4	35.4	.0	1.2
		52	40.4	26.9	5.8	9.6	13.5	3.8			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

The degree field of Anthropology was not placed in the above listing because its two reported graduates had gone on for an advanced degree. Also, the results for many of these fields should be cautiously interpreted due to the small number of graduates reported for these degree fields.

When ranked according to the proportion of full-time employed graduates who found full-time employment in Pennsylvania, the Social Science degree fields ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2	3	Social Sciences, General	100.0	100.0
2	2	Political Science and Government	100.0	68.2
2	1	Urban Studies	100.0	NA
-	43	All Social Sciences Graduates	55.8	63.5
4	11	Geography	54.5	85.7
5	15	History	53.3	47.4
6	4	Economics	50.0	33.3
7	6	Sociology	33.3	66.7
8	1	Crimonology	0.0	50.0

While a substantial proportion (53.3%) of these graduates found full-time employment in Pennsylvania, this represented a decline over the previous year's value of 63.5 percent. In contract to 1983, however, most of the employment obtained was degree-related.

Results for Master's Degree Graduates in the Visual and Performing Arts

Table 3.16 lists postgraduate activity distributions for master's degree graduates in the Visual and Performing Arts.

When ranked according to the proportion of Visual and Performing Arts graduates finding full-time, degree-related employment in the Civilian Labor Market, the degree fields of Table 3.16 were ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	4	Design	100.0	100.0
2	10	Dramatic Arts	80.0	77.8
3	4	Dance	75.0	NA
4	5	Crafts	60.0	100.0
-	65	All Visual and Performing Arts Graduates	56.9	67.2
5	22	Fine Arts	45.5	66.7
6	20	Musix	45.0	68.4

TABLE 3.16

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR MASTER"S DEGREE GRADUATES IN THE VISUAL AND PERFORMING ARTS, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
CRAFTS	#	5	2	1	0	0	2	0	0	0	0
	%		40.0	20.0	.0	.0	40.0	.0	.0	.0	.0
	%	5	40.0	20.0	.0	.0	40.0	.0			
DANCE	#	4	2	1	0	0	1	0	0	0	0
	%		50.0	25.0	.0	.0	25.0	.0	.0	.0	.0
	%	4	50.0	25.0	.0	.0	25.0	.0			
DESIGN	#	5	2	2	0	0	0	0	0	0	1
	%		40.0	40.0	.0	.0	.0	.0	.0	.0	20.0
	%	4	50.0	50.0	.0	.0	.0	.0			
DRAMATIC ARTS	#	11	0	8	0	0	2	0	0	0	1
	%		.0	72.7	.0	.0	18.2	.0	.0	.0	9.1
	%	10	.0	80.0	.0	.0	20.0	.0			
FINE ARTS	#	22	6	4	2	0	8	2	0	0	0
	%		27.3	18.2	9.1	.0	36.4	9.1	.0	.0	.0
	%	22	27.3	18.2	9.1	.0	36.4	9.1			
MUSIC	#	28	3	6	2	0	5	4	7	0	1
	%		10.7	21.4	7.1	.0	17.9	14.3	25.0	.0	3.6
	%	20	15.0	30.0	10.0	.0	25.0	20.0			
TOTAL		75	15	22	4	0	18	6	7	0	3
			20.0	29.3	5.3	.0	24.0	8.0	9.3	.0	4.0
		65	23.1	33.8	6.2	.0	27.7	9.2			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

The master's degree graduates in the Visual and Peforming Arts were substantially less successful in finding degree-related employment in 1984 than in 1983, i.e., 67.2 percent compared with 56.9 percent. This is reflected by a far greater degree of part-time employment, 27.7 percent in 1984 compared with 3.1 percent, and a greater degree of unemployment, 9.2 percent compared with 4.7 percent in 1983, along with a rise in the pursuit of an advanced degree in Music (17.4% to 25.0%).

When ranked according to the proportion of full-time employed graduates finding full-time employment in Pennsylvania, the Visual and Performing Arts degree fields ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2	3	Crafts	66.7	66.7
2	3	Dance	66.7	NA
2	12	Fine Arts	66.7	69.2
4	4	Design	50.0	0.0
-	41	All Visual and Performing Arts Graduates	46.3	54.2
5	11	Music	45.5	58.8
6	8	Dramatic Arts	0.0	25.0

Graduates in Design, in Music and in Dramatic Arts had a strong tendency to find employment outside of Pennsylvania. This is due to the fact that industries that utilize these graduates are, for the most part, not located in Pennsylvania.

As in 1983, the overall picture for the Visual and Performing Arts graduates is more favorable than was found for the same type of graduates at the baccalaureate and associate degree levels, i.e., there was more degree-related employment and less unemployment at this level. The repeated pattern of Music graduates going on for an advanced degree seems to reflect the high intellectual content and skill level requirements of this discipline.

SOME COMMENTS ON THE FINDINGS FOR MASTER'S DEGREE GRADUATES

Master's degree graduates, not unexpectedly, found degree-related employment somewhat more frequently than did the associate and baccalaureate degree graduates of 1983-84, but did so less frequently than the recipients of doctoral and first-professional degrees. Of the thirty-two major discipline areas of Table 3.0, twenty-one (65.6%) were characterized as having seventy-five percent or more of their graduates finding degree-related, full-time employment when they entered the Civilian Labor Market.

X. RESULTS FOR DOCTORAL DEGREE GRADUATES

Table 4.0, on the pages that follow, summarizes the postgraduate activity of the doctoral degree graduates of 1983-84 in terms of the broadest (2-digit level) Classification of Instructional Programs (CIP) categories available. As before, a more detailed analysis of selected major disciplines from Table 4.0 will be made using a combination of the four-digit and six-digit levels of the CIP classification system.

The findings of Table 4.0 are given in terms of two separate percentage distributions that accompany the numerical counts for a given major discipline area. Numerical counts are shown for each of the postgraduate activity categories used in this study. The first of the two percentage distributions is simply the percentage of reported graduates in each type of activity. The second percentage distribution indicates the percentage of graduates in the Civilian Labor Market engaged in employment-related activity, i.e., it excludes those in military service, those pursuing an advanced degree, and those engaged in activity unrelated to employment.

For each of the major disciplines, the findings are given in terms of: (1) the number of graduates who found degree-related employment in Pennsylvania, (2) the number of graduates who found degree-related employment outside of Pennsylvania, (3) the number of graduates who found employment in Pennsylvania that was unrelated to their degree field, (4) the number of graduates who found employment outside of Pennsylvania that was unrelated to their degree field, (5) the number of graduates who found part-time employment, (6) the number of graduates who were unemployed and still seeking employment, (7) the number of graduates who had entered military service, (8) the number of graduates who were pursuing an advanced degree and, finally, (9) the number of graduates who were engaged in other activities, i.e., those not employed and not in graduate school but who were also not seeking employment.

Below is a comparison of selected measures on the doctoral degree graduates of 1976-77 through 1983-84. The measures were derived from this report and from previous reports in this series.

Year	Responding Graduates	Full-Time Employed	Part-Time Employed	Un-employed	Seeking Advanced Degree	Full-Time Employed In Field Prepared	Full-Time Employed In Pa.
		%	%	%	%	%	%
1977	500	90.8	3.6	4.2	1.4	90.3	57.0
1978	449	88.8	3.3	4.0	3.8	89.0	54.6
1979	339	90.9	3.2	5.0	0.9	95.8	50.3
1980	339	90.4	3.0	3.3	3.3	97.0	44.9
1981	375	91.7	3.5	3.2	1.6	95.3	41.3
1982	516	85.9	6.6	3.5	3.7	95.2	46.3
1983	277	87.0	4.7	5.8	1.8	91.7	40.7
1984	468	92.3	1.5	3.5	1.7	94.7	40.3

TABLE 4.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR DOCTORAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
01 AGRIBUSINESS AND AGRICULTURAL PRODUCTION	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
02 AGRICULTURAL SCIENCES	#	4	1	3	0	0	0	0	0	0	0
	%		25.0	75.0	.0	.0	.0	.0	.0	.0	.0
	%	4	25.0	75.0	.0	.0	.0	.0			
03 RENEWABLE NATURAL RESOURCES	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
04 ARCHITECTURE AND ENVIRONMENTAL DESIGN	#	2	0	2	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	2	.0	100.0	.0	.0	.0	.0			
05 AREA AND ETHNIC STUDIES	#	3	0	0	0	1	0	0	2	0	0
	%		.0	.0	.0	33.3	.0	.0	66.7	.0	.0
	%	1	.0	.0	.0	100.0	.0	.0			
06 BUSINESS AND MANAGEMENT	#	16	3	13	0	0	0	0	0	0	0
	%		18.8	81.3	.0	.0	.0	.0	.0	.0	.0
	%	16	18.8	81.3	.0	.0	.0	.0			
09 COMMUNICATIONS	#	1	0	0	1	0	0	0	0	0	0
	%		.0	.0	100.0	.0	.0	.0	.0	.0	.0
	%	1	.0	.0	100.0	.0	.0	.0			

TABLE 4.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR DOCTORAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
11 COMPUTER AND INFORMATION SCIENCES											
	#	7	1	6	0	0	0	0	0	0	0
	%		14.3	85.7	.0	.0	.0	.0	.0	.0	.0
	%	7	14.3	85.7	.0	.0	.0	.0			
13 EDUCATION											
	#	104	53	41	0	0	2	5	2	0	1
	%		51.0	39.4	.0	.0	1.9	4.8	1.9	.0	1.0
	%	101	52.5	40.6	.0	.0	2.0	5.0			
14 ENGINEERING											
	#	54	20	29	0	0	1	3	0	0	1
	%		37.0	53.7	.0	.0	1.9	5.6	.0	.0	1.9
	%	53	37.7	54.7	.0	.0	1.9	5.7			
15 ENGINEERING AND ENGINEERING-RELATED TECHNOLOGIES											
	#	0	0	0	0	0	0	0	0	0	0
	%		.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
16 FOREIGN LANGUAGES											
	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
18 HEALTH SCIENCES											
	#	98	47	50	0	0	0	0	1	0	0
	%		48.0	51.0	.0	.0	.0	.0	1.0	.0	.0
	%	97	48.5	51.5	.0	.0	.0	.0			
19 HOME ECONOMICS											
	#	6	0	5	0	0	1	0	0	0	0
	%		.0	83.3	.0	.0	16.7	.0	.0	.0	.0
	%	6	.0	83.3	.0	.0	16.7	.0			

TABLE 4.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR DOCTORAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
23 LETTERS	#	23	6	16	0	1	0	0	0	0	0
	%		26.1	69.6	.0	4.3	.0	.0	.0	.0	.0
	%	23	26.1	69.6	.0	4.3	.0	.0			
26 LIFE SCIENCES	#	33	8	16	0	3	1	3	2	0	0
	%		24.2	48.5	.0	9.1	3.0	9.1	6.1	.0	.0
	%	31	25.8	51.6	.0	9.7	3.2	9.7			
27 MATHEMATICS	#	16	4	11	0	0	0	0	0	1	0
	%		25.0	68.8	.0	.0	.0	.0	.0	6.3	.0
	%	15	26.7	73.3	.0	.0	.0	.0			
30 MULTI/INTERDISCIPLINARY STUDIES	#	0	0	0	0	0	0	0	0	0	0
	%		.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	0	.0	.0	.0	.0	.0	.0			
31 PARKS AND RECREATION	#	3	0	3	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	3	.0	100.0	.0	.0	.0	.0			
38 PHILOSOPHY AND RELIGION	#	9	1	2	5	1	0	0	0	0	0
	%		11.1	22.2	55.6	11.1	.0	.0	.0	.0	.0
	%	9	11.1	22.2	55.6	11.1	.0	.0			
40 PHYSICAL SCIENCES	#	44	8	26	0	5	0	2	1	0	2
	%		18.2	59.1	.0	11.4	.0	4.5	2.3	.0	4.5
	%	41	19.5	63.4	.0	12.2	.0	4.9			

TABLE 4.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY MAJOR DISCIPLINE FOR DOCTORAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED OTHER FIELD IN PA	EMPLOYED OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
42 PSYCHOLOGY	#	17	4	8	1	3	1	0	0	0	0
	%		23.5	47.1	5.9	17.6	5.9	.0	.0	.0	.0
	%	17	23.5	47.1	5.9	17.6	5.9	.0			
44 PUBLIC AFFAIRS	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
45 SOCIAL SCIENCES	#	22	7	9	2	0	1	3	0	0	0
	%		31.8	40.9	9.1	.0	4.5	13.6	.0	.0	.0
	%	22	31.8	40.9	9.1	.0	4.5	13.6			
50 VISUAL AND PERFORMING ARTS	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
TOTAL		468	165	244	9	14	7	16	8	1	4
			35.3	52.1	1.9	3.0	1.5	3.4	1.7	.2	.9
		455	36.3	53.6	2.0	3.1	1.5	3.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

The more positive degree-related employment findings for 1984 doctoral graduates were not unexpected in light of reports that doctoral degree recipients have been experiencing less difficulty in their efforts to find employment due to recent economic improvements.

These findings suggest that the strength of the impact of the recent recession and of budgetary cuts upon labor market demand for doctoral degree graduates has been substantially lessened. It is possible, moreover, that the impending increase in retirements due to the aging of the post-World War II entrants into the work force, combined with an improving economic climate, will markedly change the recent pattern of decline into one of an even greater rate of full-time degree-related employment than has been seen for many years.

Doctoral Degree Graduates Employed Full-Time in Their Field of Preparation

Table 4.01 ranks the major disciplines of Table 4.0 according to the proportion of 1984 doctoral degree graduates who found full-time employment related to their field of preparation. In general, the disciplines at the top of Table 4.01 are those associated with the scientific and technological aspects of our society, i.e., Engineering Technologies, Computer and Information Sciences, Architecture and Environmental Design, Agricultural Sciences and Engineering, or with the economic aspects, e.g., Business and Management. The disciplines ranked lower down are the Life and Social Sciences, and Education.

Full-Time Degree-Related Employment of Doctoral Degree Graduates in the Civilian Labor Market

Table 4.02 ranks the major disciplines according to the proportion of graduates in the Civilian Labor Market who found full-time, degree-related employment.

Since postdoctoral education is not commonplace, the rank order of the major disciplines found in Table 4.02 should not be greatly different from that found in Table 4.01 and this is indeed the case. The only exceptions were the findings for graduates in the major disciplines of Mathematics and the Health Sciences, where Mathematics moved from a rank of 13 in Table 4.01 to a rank of 9 in Table 4.02, and the Health Sciences, moved from a rank of 11 to a rank of 8.

Doctoral Degree Graduates Employed Full-Time in Pennsylvania

Table 4.03 ranks the major disciplines of Table 4.0 according to the percentage of graduates with full-time employment who found employment in Pennsylvania.

For the most part, the disciplines with the highest rate of Pennsylvania employment at the doctoral level are the same as those with a low ranking on Tables 4.01 and 4.02. Pennsylvania's needs in 1984 did not seem, for the most part, to be for doctoral graduates in the Sciences but rather they were centered around a need for graduates in Education, in the Social Sciences, and in the Health Sciences.

TABLE 4.01

A RANK ORDERING OF DOCTORAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES FINDING FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
5.5	Agribusiness and Agricultural Production	100.0*	NA
5.5	Agricultural Sciences	100.0*	100.0*
5.5	Renewable Natural Resources	100.0*	100.0*
5.5	Architecture and Environmental Design	100.0*	100.0*
5.5	Business and Management	100.0	100.0
5.5	Computer and Information Sciences	100.0*	100.0
5.5	Foreign Languages	100.0*	NA
5.5	Parks and Recreation	100.0*	NA
5.5	Public Affairs	100.0*	100.0*
5.5	Visual and Performing Arts	100.0*	50.0*
11	Health Sciences	99.0	63.7
12	Letters	95.7	87.5
13	Mathematics	93.8	100.0*
14	Engineering	90.7	88.9
15	Education	90.4	78.3
-	All Graduates	87.4	79.8
16	Home Economics	83.3*	42.9*
17	Physical Sciences	77.3	84.4
18	Life Sciences	72.7	74.2
19.5	Social Sciences	72.7	58.3
19.5	Psychology	70.6	74.2
21	Philosophy and Religion	33.3*	44.4*
22.5	Area and Ethnic Studies	0.0*	NA
22.5	Communications	0.0*	NA

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED STUDENTS. PROGRAM WITH NO REPORTED GRADUATES ARE EXCLUDED.

TABLE 4.02

A RANK ORDERING OF DOCTORAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES IN THE CIVILIAN LABOR MARKET WHO FOUND FULL-TIME EMPLOYMENT TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
6.5	Agribusiness and Agricultural Production	100.0*	NA
6.5	Agricultural Sciences	100.0*	100.0*
6.5	Renewable Natural Resources	100.0*	100.0*
6.5	Architecture and Environmental Design	100.0*	100.0*
6.5	Business and Management	100.0	100.0
6.5	Computer and Information Sciences	100.0*	100.0
6.5	Foreign Languages	100.0*	NA
6.5	Health Sciences	100.0	70.0*
6.5	Mathematics	100.0	100.0*
6.5	Parks and Recreation	100.0*	NA
6.5	Public Affairs	100.0*	100.0*
6.5	Visual and Performing Arts	100.0*	50.0*
13	Letters	95.7	87.5
14	Education	93.1	78.3
15	Engineering	92.5	92.3
-	All Graduates	89.9	81.9
16	Home Economics	83.3*	42.9*
17	Physical Sciences	82.9	87.1
18	Life Sciences	77.4	79.3
19	Social Sciences	72.7	58.3
20	Psychology	70.6	76.6
21	Philosophy and Religion	33.3*	50.0*
22.5	Area and Ethnic Studies	0.0*	NA
22.5	Communications	0.0*	NA

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET. PROGRAM AREAS WITH NO REPORTED CIVILIAN LABOR MARKET EMPLOYMENT ARE NOT SHOWN HERE.

TABLE 4.03

A RANK ORDERING OF DOCTORAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF FULL-TIME EMPLOYED 1983-84 GRADUATES WHO FOUND EMPLOYMENT IN PENNSYLVANIA

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1.5	Communications	100.0*	NA
1.5	Visual and Performing Arts	100.0*	50.0*
3	Philosophy and Religion	66.7*	50.0*
4	Education	56.4	53.8
5.5	Public Affairs	50.0*	33.3*
5.5	Social Sciences	50.0	70.0*
7	Health Sciences	48.5	60.0*
8	Engineering	40.8	33.3
-	All Graduates	40.3	40.7
9	Psychology	31.3	48.0
10	Life Sciences	29.6	38.5
11	Mathematics	26.7	12.5*
12	Letters	26.1	33.3
13	Agricultural Sciences	25.0*	20.0*
14	Physical Sciences	20.5	32.1
15	Business and Management	18.8	23.1
16	Computer and Information Sciences	14.3*	64.3
20	Agribusiness and Agricultural Production	0.0*	NA
20	Renewable Natural Resources	0.0*	0.0*
20	Architecture and Environmental Design	0.0*	0.0*
20	Area and Ethnic Studies	0.0*	NA
20	Foreign Languages	0.0*	NA
20	Home Economics	0.0*	0.0*
20	Parks and Recreation	0.0*	NA

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED FULL-TIME EMPLOYED GRADUATES. PROGRAM AREAS WITH NO REPORTED GRADUATES ARE EXCLUDED.

TABLE 4.04

A RANK ORDERING OF DOCTORAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1983-84 GRADUATES IN THE CIVILIAN LABOR MARKET

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Social Sciences	13.6	0.0
2	Life Sciences	9.7	0.0
3	Engineering	5.7	3.8
4	Education	5.0	13.0
5	Physical Sciences	4.9	9.7
-	All Graduates	3.5	5.9
14.5	Agribusiness and Agricultural Production	0.0*	NA
14.5	Agricultural Sciences	0.0*	0.0*
14.5	Renewable Natural Resources	0.0*	0.0*
14.5	Architecture and Environmental Design	0.0*	0.0*
14.5	Area and Ethnic Studies	0.0*	NA
14.5	Business and Management	0.0	0.0
14.5	Communications	0.0*	NA
14.5	Computer and Information Sciences	0.0*	0.0
14.5	Foreign Languages	0.0*	NA
14.5	Health Sciences	0.0	0.0*
14.5	Home Economics	0.0*	14.3*
14.5	Letters	0.0	6.3
14.5	Mathematics	0.0	0.0*
14.5	Parks and Recreation	0.0*	NA
14.5	Philosophy and Religion	0.0*	12.5*
14.5	Psychology	0.0	6.7
14.5	Public Affairs	0.0*	0.0*
14.5	Visual and Performing Arts	0.0*	25.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET. PROGRAM AREAS WITH NO REPORTED GRADUATES ARE EXCLUDED.

Unemployed Doctoral Degree Graduates in the Civilian Labor Market

While one would not expect, overall, a high degree of unemployment for doctoral degree graduates who entered the Civilian Labor Market, a certain amount of unemployment was, nevertheless, reported in Table 4.04.

Not unexpectedly, graduates with a doctorate in the Social Sciences had the highest rate of unemployment, with Life Science graduates, Engineering graduates, Education graduates, and Physical Sciences graduates experiencing a substantial rate of unemployment. Only five (21.7%) of the twenty-three doctoral discipline areas found in Table 4.0 had any amount of unemployment. This contrasts with the findings for 1983 where forty percent of the listed disciplines still had an appreciable amount of unemployment.

Doctoral Degree Graduates Pursuing Postdoctoral Education

It is unlikely that any appreciable amount of postdoctoral work will characterize these graduates but, as can be seen in Table 4.05, there was some reported postdoctoral work for graduates in Area and Ethnic Studies and the Life Sciences.

DETAILED ANALYSES OF SELECTED DOCTORAL DEGREE DISCIPLINES

As with the lower level degrees, many of the two-digit level categories of Table 4.0 are too generalized for the purposes of the users of this report. A selection from the major discipline areas of Table 4.0 has therefore been made and findings, at the more detailed four-digit and, in some instances, the six-digit level of the CIP code are presented below.

Results for Doctoral Degree Graduates in Business and Management

Table 4.06 breaks out, at a more detailed level, the major discipline of Business, Marketing, and Management found in Table 4.0. The most striking feature of Table 4.06 is the fact that all of the graduates in Table 4.06 found degree-related employment regardless of the degree field under analysis. The only variation lay in whether the reported employment was in Pennsylvania, or outside of Pennsylvania.

Only one of the two disciplines in Table 4.06 had any reported Pennsylvania employment. This was the degree field of Business Administration and Management where only 23.1 percent of these graduates had found full-time, degree-related work in Pennsylvania, in contrast to 1983 where 60 percent had found degree-related work in Pennsylvania. The only other discipline of Table 4.06, Human Resources Development, had a rate of 100 percent degree-related employment with 100 percent of that employment outside of Pennsylvania. Obviously, at the doctoral level, Pennsylvania's employment needs are not high with regard to the more technical and scientific business and management disciplines.

TABLE 4.05

A RANK ORDERING OF DOCTORAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1983-84 GRADUATES PURSUING AN ADVANCED DEGREE

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Area and Ethnic Studies	66.7*	NA
2	Life Sciences	6.1	3.2
3	Physical Sciences	2.3	0.0
4	Education	1.9	0.0
-	All Graduates	1.7	1.8
5	Health Sciences	1.0	9.1
14.5	Agribusiness and Agricultural Production	0.0*	NA
14.5	Agricultural Sciences	0.0*	0.0*
14.5	Renewable Natural Resources	0.0*	0.0*
14.5	Architecture and Environmental Design	0.0*	0.0*
14.5	Business and Management	0.0	0.0
14.5	Communications	0.0*	NA
14.5	Computer and Information Sciences	0.0*	0.0
14.5	Engineering	0.0	0.0
14.5	Foreign Languages	0.0*	NA
14.5	Home Economics	0.0*	0.0*
14.5	Letters	0.0	0.0
14.5	Mathematics	0.0	0.0*
14.5	Parks and Recreation	0.0*	NA
14.5	Philosophy and Religion	0.0*	11.1*
14.5	Psychology	0.0	3.2
14.5	Public Affairs	0.0*	0.0*
14.5	Social Sciences	0.0	0.0
14.5	Visual and Performing Arts	0.0*	0.0*

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES. PROGRAM AREAS WITH NO REPORTED GRADUATES ARE EXCLUDED.

TABLE 4.06

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY
DEGREE FIELD FOR DOCTORAL DEGREE GRADUATES IN BUSINESS, MARKETING, AND MANAGEMENT, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BUSINESS AND MANAGEMENT											
BUSINESS ADMINISTRATION AND MANAGEMENT											
	#	13	3	10	0	0	0	0	0	0	0
	%		23.1	76.9	.0	.0	.0	.0	.0	.0	.0
	%	13	23.1	76.9	.0	.0	.0	.0			
HUMAN RESOURCES DEVELOPMENT											
	#	3	0	3	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	3	.0	100.0	.0	.0	.0	.0			
*TOTAL BUSINESS AND MANAGEMENT											
		16	3	13	0	0	0	0	0	0	0
			18.8	81.3	.0	.0	.0	.0	.0	.0	.0
		16	18.8	81.3	.0	.0	.0	.0			
TOTAL											
		16	3	13	0	0	0	0	0	0	0
			18.8	81.3	.0	.0	.0	.0	.0	.0	.0
		16	18.8	81.3	.0	.0	.0	.0			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

Results for Doctoral Degree Graduates in Education

Table 4.07 breaks out the Education category of Table 4.0 in terms of specific degree fields within that discipline. Although a variety of analyses of Table 4.07 can be made, only two will be made here, i.e., an analysis of full-time, degree-related Civilian Labor Market employment and an analysis of the rate of full-time employment in Pennsylvania for graduates who obtained full-time employment in 1984.

In terms of full-time, degree-related, Civilian Labor Market rates of employment, the rankings of the doctoral degree fields of Table 4.07 are as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
9	11	Education Administration	100.0	75.0
9	1	Education Media	100.0	NA
9	1	Social Foundations	100.0	NA
9	4	Special Education, General	100.0	100.0
9	1	Student Counseling and Personnel Services	100.0	50.0
9	7	Adult and Continuing Education	100.0	NA
9	2	Agricultural Education	100.0	50.0
9	3	Business Education	100.0	NA
9	1	English Education	100.0	NA
9	1	Industrial Arts Education	100.0	NA
9	1	Marketing and Distributive Education	100.0	NA
9	1	Music Education	100.0	NA
9	3	Physical Education	100.0	66.7
9	2	Reading Education	100.0	NA
9	1	Science Education	100.0	NA
9	6	Trade and Industrial Education	100.0	66.7
9	12	Teacher Education, Specific Subject Areas, Other	100.0	NA
-	101	All Education Graduates	93.1	78.3
18	21	School Psychology	90.5	83.3
19	6	Health Education	83.3	33.3
20.5	12	Curriculum and Instruction	75.0	66.6
20.5	4	Home Economics Education	75.0	100.0

This listing suggests that there was a higher level of demand in 1984 than in 1983 for doctoral degree holders.

When the doctoral degree fields of Table 4.07 were ranked in terms of the proportion of full-time employed graduates who obtained full-time employment in Pennsylvania, the degree fields were ranked as follows:

TABLE 4.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR DOCTORAL DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED OTHER IN PA	EMPLOYED IN FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
CURRICULUM AND INSTRUCTION											
CURRICULUM AND INSTRUCTION											
	#	13	5	4	0	0	0	3	0	0	1
	%		38.5	30.8	.0	.0	.0	23.1	.0	.0	7.7
	%	12	41.7	33.3	.0	.0	.0	25.0			
*TOTAL CURRICULUM AND INSTRUCTION											
		13	5	4	0	0	0	3	0	0	1
			38.5	30.8	.0	.0	.0	23.1	.0	.0	7.7
		12	41.7	33.3	.0	.0	.0	25.0			
EDUCATION ADMINISTRATION											
	#	11	7	4	0	0	0	0	0	0	0
	%		63.6	36.4	.0	.0	.0	.0	.0	.0	.0
	%	11	63.6	36.4	.0	.0	.0	.0			
*TOTAL EDUCATION ADMINISTRATION											
		11	7	4	0	0	0	0	0	0	0
			63.6	36.4	.0	.0	.0	.0	.0	.0	.0
		11	63.6	36.4	.0	.0	.0	.0			
EDUCATIONAL MEDIA											
EDUCATIONAL MEDIA											
	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0		.0	.0	.0	.0			
*TOTAL EDUCATIONAL MEDIA											
		1	1	0	0	0	0	0	0	0	0
			100.0	.0	.0	.0	.0	.0	.0	.0	.0
		1	100.0		.0	.0	.0	.0			

TABLE 4.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR DOCTORAL DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
SCHOOL PSYCHOLOGY											
SCHOOL PSYCHOLOGY											
	#	21	13	6	0	0	1	1	0	0	0
	%		61.9	28.6	.0	.0	4.8	4.8	.0	.0	.0
	%	21	61.9	28.6	.0	.0	4.8	4.8			
*TOTAL SCHOOL PSYCHOLOGY											
		21	13	6	0	0	1	1	0	0	0
			61.9	28.6	.0	.0	4.8	4.8	.0	.0	.0
		21	61.9	28.6	.0	.0	4.8	4.8			
SOCIAL FOUNDATIONS											
SOCIAL FOUNDATIONS											
	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
*TOTAL SOCIAL FOUNDATIONS											
		1	0	1	0	0	0	0	0	0	0
			.0	100.0	.0	.0	.0	.0	.0	.0	.0
		1	.0	100.0	.0	.0	.0	.0			
SPECIAL EDUCATION											
SPECIAL EDUCATION, GENERAL											
	#	4	1	3	0	0	0	0	0	0	0
	%		25.0	75.0	.0	.0	.0	.0	.0	.0	0
	%	4	25.0	75.0	.0	.0	.0	.0			
*TOTAL SPECIAL EDUCATION											
		4	1	3	0	0	0	0	0	0	0
			25.0	75.0	.0	.0	.0	.0	.0	.0	0
		4	25.0	75.0	.0	.0	.0	.0			

TABLE 4.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR DOCTORAL DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
STUDENT COUNSELING AND PERSONNEL SERVICES											
STUDENT COUNSELING AND PERSONNEL SERVICES											
	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0		.0	.0	.0	.0			
*TOTAL STUDENT COUNSELING AND PERSONNEL SERVICES											
		1	1	0	0	0	0	0	0	0	0
			100.0	.0	.0	.0	.0	.0	.0	.0	.0
		1	100.0		.0	.0	.0	.0			
TEACHER EDUCATION, GENERAL PROGRAMS											
ADULT AND CONTINUING EDUCATION											
	#	7	6	1	0	0	0	0	0	0	0
	%		85.7	14.3	.0	.0	.0	.0	.0	.0	.0
	%	7	85.7	14.3	.0	.0	.0	.0			
*TOTAL TEACHER EDUCATION, GENERAL PROGRAMS											
		7	6	1	0	0	0	0	0	0	0
			85.7	14.3	.0	.0	.0	.0	.0	.0	.0
		7	85.7	14.3	.0	.0	.0	.0			
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
AGRICULTURAL EDUCATION											
	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
BUSINESS EDUCATION											
	#	3	1	2	0	0	0	0	0	0	0
	%		33.3	66.7	.0	.0	.0	.0	.0	.0	.0
	%	3	33.3	66.7	.0	.0	.0	.0			

TABLE 4.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR DOCTORAL DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
ENGLISH EDUCATION	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0		.0	.0	.0	.0			
HEALTH EDUCATION	#	6	2	3	0	0	1	0	0	0	0
	%		33.3	50.0	.0	.0	16.7	.0	.0	.0	.0
	%	6	33.3	50.0	.0	.0	16.7	.0			
HOME ECONOMICS EDUCATION	#	4	1	2	0	0	0	1	0	0	0
	%		25.0	50.0	.0	.0	.0	25.0	.0	.0	.0
	%	4	25.0	50.0	.0	.0	.0	25.0			
INDUSTRIAL ARTS EDUCATION	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0		.0	.0	.0	.0			
MARKETING AND DISTRIBUTIVE EDUCATION	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
MUSIC EDUCATION	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
PHYSICAL EDUCATION	#	3	0	3	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	3	.0	100.0	.0	.0	.0	.0			

TABLE 4.07

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE FIELD FOR DOCTORAL DEGREE GRADUATES IN EDUCATION, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
READING EDUCATION											
	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
SCIENCE EDUCATION											
	#	2	1	0	0	0	0	0	1	0	0
	%		50.0	.0	.0	.0	.0	.0	50.0	.0	.0
	%	1	100.0		.0	.0	.0	.0			
TRADE AND INDUSTRIAL EDUCATION											
	#	7	4	2	0	0	0	0	1	0	0
	%		57.1	28.6	.0	.0	.0	.0	14.3	.0	.0
	%	6	66.7	33.3	.0	.0	.0	.0			
TEACHER EDUCATION, SPECIFIC SUBJECT AREAS, OTHER											
	#	12	6	6	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	12	50.0	50.0	.0	.0	.0	.0			
*TOTAL TEACHER EDUCATION, SPECIFIC SUBJECT AREAS											
		45	19	22	0	0	1	1	2	0	0
			42.2	48.9	.0	.0	2.2	2.2	4.4	.0	.0
		43	44.2	51.2	.0	.0	2.3	2.3			
TOTAL											
		104	53	41	0	0	2	5	2	0	1
			51.0	39.4	.0	.0	1.9	4.8	1.9	.0	1.0
		101	52.5	40.6	.0	.0	2.0	5.0			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
3	1	Educational Media	100.0	NA
3	1	Student Counseling and Personnel Services	100.0	50.0
3	1	English Education	100.0	NA
3	1	Industrial Arts Education	100.0	NA
3	1	Science Education	100.0	NA
6	7	Adult and Continuing Education	85.7	NA
7	19	School Psychology	68.4	60.0
8	6	Trade and Industrial Education	66.7	100.0
9	11	Education Administration	63.6	100.0
-	94	All Education Graduates	56.4	53.8
10	9	Curriculum and Instruction	55.5	66.7
12	2	Agricultural Education	50.0	50.0
12	2	Reading Education	50.0	NA
12	12	Teacher Educaton, Specific Subject Areas, Other	50.0	NA
14	5	Health Education	40.0	100.0
15.5	3	Business Education	33.3	NA
15.5	3	Home Economics Education	33.3	33.3
17	4	Special Education, General	25.0	0.0
19.5	1	Social Foundations	0.0	NA
19.5	1	Marketing and Distributive Education	0.0	NA
19.5	1	Music Education	0.0	NA
19.5	3	Physical Education	0.0	0.0

Results for Doctoral Degree Graduates in Engineering

Table 4.08 summarizes the postgraduate activities of doctoral degree graduates in specific degree field specialties subsumed under the major discipline of Engineering in Table 4.0.

Inspection of Table 4.08 quickly reveals that, with the exception of graduates in the degree fields of Civil Engineering, of Materials Engineering, Mechanical Engineering, and Metallurgical Engineering, graduates in Engineering, at the doctoral level, have universally found degree-related employment.

When the degree fields of Table 4.08 were ranked according to the proportion of full-time employed graduates who were employed in Pennsylvania, these degree fields were ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	5	Mechanical Engineering	80.0	NA
2	3	Engineering, Other	66.7	NA
4.5	2	Bioengineering and Biomedical Engineering	50.0	NA

TABLE 4.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR DOCTORAL DEGREE GRADUATES IN ENGINEERING, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
BIOENGINEERING AND BIOMEDICAL ENGINEERING											
	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
CERAMIC ENGINEERING											
	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
CHEMICAL ENGINEERING											
	#	12	3	9	0	0	0	0	0	0	0
	%		25.0	75.0	.0	.0	.0	.0	.0	.0	.0
	%	12	25.0	75.0	.0	.0	.0	.0			
CIVIL ENGINEERING											
	#	5	1	3	0	0	1	0	0	0	0
	%		20.0	60.0	.0	.0	20.0	.0	.0	.0	.0
	%	5	20.0	60.0	.0	.0	20.0	.0			
ELECTRICAL, ELECTRONICS, AND COMMUNICATIONS ENGINEERING											
	#	5	2	3	0	0	0	0	0	0	0
	%		40.0	60.0	.0	.0	.0	.0	.0	.0	.0
	%	5	40.0	60.0	.0	.0	.0	.0			
ENGINEERING MECHANICS											
	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
INDUSTRIAL ENGINEERING											
	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
MATERIALS ENGINEERING											
	#	5	2	2	0	0	0	1	0	0	0
	%		40.0	40.0	.0	.0	.0	20.0	.0	.0	.0
	%	5	40.0	40.0	.0	.0	.0	20.0			

TABLE 4.08

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR DOCTORAL DEGREE GRADUATES IN ENGINEERING, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
MECHANICAL ENGINEERING	#	7	4	1	0	0	0	1	0	0	1
	%		57.1	14.3	.0	.0	.0	14.3	.0	.0	14.3
	%	6	66.7	16.7	.0	.0	.0	16.7			
METALLURGICAL ENGINEERING	#	9	3	5	0	0	0	1	0	0	0
	%		33.3	55.6	.0	.0	.0	11.1	.0	.0	.0
	%	9	33.3	55.6	.0	.0	.0	11.1			
NUCLEAR ENGINEERING	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
ENGINEERING, OTHER	#	3	2	1	0	0	0	0	0	0	0
	%		66.7	33.3	.0	.0	.0	.0	.0	.0	.0
	%	3	66.7	33.3	.0	.0	.0	.0			
TOTAL		54	20	29	0	0	1	3	0	0	1
			37.0	53.7	.0	.0	1.9	5.6	.0	.0	1.9
		53	37.7	54.7	.0	.0	1.9	5.7			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

4.5	2	Ceramic Engineering	50.0	50.0
4.5	2	Engineering Mechanics	50.0	NA
4.5	4	Materials Engineering	50.0	40.0
-	49	All Engineering Graduates	40.8	30.8
7	5	Electrical, Electronics, and Communications Engineering	40.0	50.0
8	8	Metallurgical Engineering	37.5	28.6
9.5	12	Chemical Engineering	25.0	0.0
9.5	4	Civil Engineering	25.0	NA
11.5	1	Industrial Engineering	0.0	NA
11.5	1	Nuclear Engineering	0.0	NA

This ranking strongly suggests that doctoral graduates in Engineering are, as might be expected, seeking employment in a highly competitive national or even international job market with Pennsylvania typically attracting less than fifty percent of the full-time employed graduates.

Results for Doctoral Graduates in the Physical Sciences

Table 4.09 summarizes the postgraduate activities reported for doctoral degree graduates with degrees in the Physical Science. A visual inspection of Table 4.09 quickly reveals that, as in the case of Engineering graduates, there is a strong pattern of high degree-related employment. This is true for all of the sciences listed with the exception of the degree field of Physics where only 71.5 percent had found degree-related employment and 14.3 percent were still unemployed. Another exception to the pattern of 100 percent degree-related employment was that of the field of Chemistry where 85.7 percent of the graduates found degree-related, full-time employment, 9.5 percent found unrelated full-time employment, and 4.8 percent were reported as unemployed.

When ranked according to the proportion of full-time employed doctoral graduates finding employment in Pennsylvania, the Physical Sciences were rank ordered as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
1	6	Physics	33.3	16.7
2	20	Chemistry	30.0	42.9
-	39	All Physical Science Graduates	20.5	32.1
4.5	1	Astronomy	0.0	100.0
4.5	1	Atmospheric Sciences and Meteorology	0.0	50.0
4.5	5	Geological Sciences	0.0	0.0
4.5	6	Physical Sciences, Other	0.0	0.0

It is apparent that Physical Science graduates, at the doctoral level, are typically competing in a national or even international job market with a resulting high rate of degree-related Civilian Labor Market employment (82.9%) and a low (20.5%) degree of full-time Pennsylvania based employment in 1984.

TABLE 4.09

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR DOCTORAL DEGREE GRADUATES IN THE PHYSICAL SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
ASTRONOMY											
	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
ATMOSPHERIC SCIENCES AND METEOROLOGY											
	#	1	0	1	0	0	0	0	0	0	0
	%		.0	100.0	.0	.0	.0	.0	.0	.0	.0
	%	1	.0	100.0	.0	.0	.0	.0			
CHEMISTRY											
	#	24	6	12	0	2	0	1	1	0	2
	%		25.0	50.0	.0	8.3	.0	4.2	4.2	.0	8.3
	%	21	28.6	57.1	.0	9.5	.0	4.8			
GEOLOGICAL SCIENCES											
	#	5	0	4	0	1	0	0	0	0	0
	%		.0	80.0	.0	20.0	.0	.0	.0	.0	.0
	%	5	.0	80.0	.0	20.0	.0	.0			
PHYSICS											
	#	7	2	3	0	1	0	1	0	0	0
	%		28.6	42.9	.0	14.3	.0	14.3	.0	.0	.0
	%	7	28.6	42.9	.0	14.3	.0	14.3			
PHYSICAL SCIENCES, OTHER											
	#	6	0	5	0	1	0	0	0	0	0
	%		.0	83.3	.0	16.7	.0	.0	.0	.0	.0
	%	6	.0	83.3	.0	16.7	.0	.0			
TOTAL											
		44	8	26	0	5	0	2	1	0	2
			18.2	59.1	.0	11.4	.0	4.5	2.3	.0	4.5
		41	19.5	63.4	.0	12.2	.0	4.9			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

Results for Doctoral Degree Graduates in Psychology

Table 4.10 summarizes in greater detail the postgraduate activities of doctoral degree graduates in the major discipline of Psychology.

Visual inspection of Table 4.10 quickly reveals that Pennsylvania's 1984 doctoral graduates in Psychology were reasonably likely to find degree-related, full-time employment in the Civilian Labor Market. Seventy-one percent of the graduates had degree-related, full-time employment by Fall 1984 compared with a figure of seventy-seven percent for doctoral degree graduates in Psychology in 1983.

It would seem, based upon the data in Table 4.10, that a doctorate in Psychology is still a reasonably viable choice occupationally, particularly in a specific areas of specialization other than General Psychology. However, very few of these graduates find employment in Pennsylvania.

Results for Doctoral Degree Graduates in the Social Sciences

Table 4.11 summarizes in greater detail the postgraduate activities of doctoral degree recipients in the major discipline area referred to in Table 4.0 as the Social Sciences.

When ranked according to the proportion finding full-time, degree-related employment in the Civilian Labor Market, the doctoral degree fields in the Social Sciences ranked as follows:

RANK	N	DEGREE FIELD	1984 PERCENT	1983 PERCENT
2	4	Economics	100.0	NA
2	2	Geography	100.0	0.0
2	1	Social Sciences, Other	100.0	0.0
4	6	History	83.4	71.5
-	22	All Social Science Graduates	72.7	58.3
5	3	Political Science and Government	66.7	100.0
6	6	Anthropology	33.4	50.0

With regard to the proportion of full-time employed graduates finding full-time employment in Pennsylvania, 66.7 percent of the graduates in the degree field of Anthropology had such employment but this employment was not likely to be degree-related employment. Of the Social Sciences, only Anthropology and Political Science and Government were found to have an appreciable amount of employment that is unrelated to the graduate's degree field or an appreciable amount of part-time work or unemployment. Social Science graduates seem to be responding to a national market rather than local Pennsylvania demand. While the degree field of Geography did have 50 percent full-time Pennsylvania employment this figure represented only one graduate.

TABLE 4.10

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR DOCTORAL DEGREE GRADUATES IN PYSCHOLOGY, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
PSYCHOLOGY, GENERAL	#	10	1	5	1	3	0	0	0	0	0
	%		10.0	50.0	10.0	30.0	.0	.0	.0	.0	.0
	%	10	10.0	50.0	10.0	30.0	.0	.0			
CLINICAL PSYCHOLOGY	#	3	1	2	0	0	0	0	0	0	0
	%		33.3	66.7	.0	.0	.0	.0	.0	.0	.0
	%	3	33.3	66.7	.0	.0	.0	.0			
COUNSELING PSYCHOLOGY	#	2	0	1	0	0	1	0	0	0	0
	%		.0	50.0	.0	.0	50.0	.0	.0	.0	.0
	%	2	.0	50.0	.0	.0	50.0	.0			
DEVELOPMENTAL PSYCHOLOGY	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
SOCIAL PSYCHOLOGY	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
TOTAL		17	4	8	1	3	1	0	0	0	0
			23.5	47.1	5.9	17.6	5.9	.0	.0	.0	.0
		17	23.5	47.1	5.9	17.6	5.9	.0			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 4.11

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY DEGREE HELD FOR DOCTORAL DEGREE GRADUATES IN THE SOCIAL SCIENCES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
ANTHROPOLOGY	#	6	1	1	1	0	1	2	0	0	0
	%		16.7	16.7	16.7	.0	16.7	33.3	.0	.0	.0
	%	6	16.7	16.7	16.7	.0	16.7	33.3			
ECONOMICS	#	4	1	3	0	0	0	0	0	0	0
	%		25.0	75.0	.0	.0	.0	.0	.0	.0	.0
	%	4	25.0	75.0	.0	.0	.0	.0			
GEOGRAPHY	#	2	1	1	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	2	50.0	50.0	.0	.0	.0	.0			
HISTORY	#	6	1	4	1	0	0	0	0	0	0
	%		16.7	66.7	16.7	.0	.0	.0	.0	.0	.0
	%	6	16.7	66.7	16.7	.0	.0	.0			
POLITICAL SCIENCE AND GOVERNMENT	#	3	2	0	0	0	0	1	0	0	0
	%		66.7	.0	.0	.0	.0	33.3	.0	.0	.0
	%	3	66.7	.0	.0	.0	.0	33.3			
SOCIAL SCIENCES, OTHER	#	1	1	0	0	0	0	0	0	0	0
	%		100.0	.0	.0	.0	.0	.0	.0	.0	.0
	%	1	100.0	.0	.0	.0	.0	.0			
TOTAL		22	7	9	2	0	1	3	0	0	0
			31.8	40.9	9.1	.0	4.5	13.6	.0	.0	.0
		22	31.8	40.9	9.1	.0	4.5	13.6			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

A COMMENT ON THE FINDINGS FOR DOCTORAL DEGREE GRADUATES

The doctoral degree graduate continues to experience a high level of degree-related employment although not as high as in past years. The general trend has been downward in recent years due to the recent economic recession on top of a relatively high level of production relative to current demand. The increase, in 1984, from 91.7 percent to 94.7 percent represents a reversal of this trend. The anticipated increase in departures from the labor force (death, retirements) due to the aging of the post war (World War II) generation of professionals should, in future years, increase the level of demand relative to supply.

XI. RESULTS FOR FIRST-PROFESSIONAL DEGREE GRADUATES

Table 5.0, on the pages that follow, summarizes the postgraduate activity of the first-professional graduates of 1983-84 in terms of the broadest (2-digit level) Classification of Instructional Programs (CIP) categories available.

The findings of Table 5.0 are given in terms of two separate percentage distributions that accompany the numerical counts for a given major discipline area. Numerical counts are shown for each of the postgraduate activity categories used in this study. The first of the two percentage distributions is simply the percentage of reported graduates in each type of activity. The second percentage distribution indicates the percentage of graduates in the Civilian Labor Market engaged in employment-related activity, i.e., it excludes those in military service, those pursuing an advanced degree, and those engaged in activity unrelated to employment were excluded.

For each of the major disciplines, the findings are given in terms of: (1) the number of graduates who found degree-related employment in Pennsylvania, (2) the number of graduates who found degree-related employment outside of Pennsylvania, (3) the number of graduates who found employment in Pennsylvania that was unrelated to their degree field, (4) the number of graduates who found employment outside of Pennsylvania that was unrelated to their degree field, (5) the number of graduates who found part-time employment, (6) the number of graduates who were unemployed and still seeking employment, (7) the number of graduates who had entered military service, (8) the number of graduates who were pursuing an advanced degree and, finally, (9) the number of graduates who were engaged in other activities, i.e., those not employed and not in graduate school but who were also not seeking employment.

Below is a comparison of selected measures on the first-professional graduates of 1976-77 through 1983-84. The measures were derived from this report and from previous reports in this series.

Year	Responding Graduates	Full-Time Employed	Part-Time Employed	Un-employed	Seeking Advanced Degree	Full-Time Employed In Field Prepared	Full-Time Employed In Pa.
		%	%	%	%	%	%
1977	2,645	91.9	0.5	2.2	5.4	96.4	57.1
1978	2,567	94.8	0.7	1.8	2.6	98.5	57.3
1979	2,290	95.1	1.3	1.5	2.1	98.8	60.0
1980	2,272	94.9	0.2	2.2	2.6	98.7	57.3
1981	2,184	96.1	0.3	2.1	1.5	99.5	54.9
1982	2,163	96.1	0.7	1.7	3.8	99.3	61.5
1983	2,809	81.1	1.4	1.7	8.6	95.2	57.4
1984	2,109	85.4	0.5	1.8	5.7	97.1	57.7

TABLE 5.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY PROGRAM CATEGORY FOR 1ST PROFESSIONAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
1804 DENTISTRY	#	375	134	50	9	32	0	7	107	33	3
	%		35.7	13.3	2.4	8.5	.0	1.9	28.5	8.8	.8
	%	232	57.8	21.6	3.9	13.8	.0	3.0			
1810 MEDICINE	#	664	327	327	0	0	0	0	2	7	1
	%		49.2	49.2	.0	.0	.0	.0	.3	1.1	.2
	%	654	50.0	50.0	.0	.0	.0	.0			
1812 OPTOMETRY	#	89	36	36	0	1	6	2	2	6	0
	%		40.4	40.4	.0	1.1	6.7	2.2	2.2	6.7	.0
	%	81	44.4	44.4	.0	1.2	7.4	2.5			
1813 OSTEOPATHIC MEDICINE	#	205	148	55	0	0	0	0	0	0	2
	%		72.2	26.8	.0	.0	.0	.0	.0	.0	1.0
	%	203	72.9	27.1	.0	.0	.0	.0			
1814 PHARMACY	#	4	2	2	0	0	0	0	0	0	0
	%		50.0	50.0	.0	.0	.0	.0	.0	.0	.0
	%	4	50.0	50.0	.0	.0	.0	.0			
1815 PODIATRY	#	116	59	56	0	0	0	0	0	1	0
	%		50.9	48.3	.0	.0	.0	.0	.0	.9	.0
	%	115	51.3	48.7	.0	.0	.0	.0			
1824 VETERINARY MEDICINE	#	107	43	60	0	0	0	0	4	0	0
	%		40.2	56.1	.0	.0	.0	.0	3.7	.0	.0
	%	103	41.7	58.3	.0	.0	.0	.0			

TABLE 5.0

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET
EMPLOYMENT STATUS BY PROGRAM CATEGORY FOR 1ST PROFESSIONAL DEGREE
GRADUATES FROM ALL REPORTING INSTITUTIONS IN PENNSYLVANIA, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
2201 LAW	#	549	301	165	11	0	4	30	5	5	28
	%		54.8	30.1	2.0	.0	.7	5.5	.9	.9	5.1
	%	511	58.9	32.3	2.2	.0	.8	5.9			
TOTAL		2,109	1,050	751	20	33	10	39	120	52	34
			49.8	35.6	.9	1.6	.5	1.8	5.7	2.5	1.6
		1,903	55.2	39.5	1.1	1.7	.5	2.0			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

Of the eight degree fields in Table 5.0, only three (Dentistry, Optometry, and Law) have any reported incidence of either unemployment or part-time employment.

First-Professional Degree Graduates Employed Full-Time in Their Field of Preparation

The data in Table 5.01 indicate that virtually all of the graduates in Pharmacy, Podiatry, Medicine, Osteopathic Medicine, and, to a lesser degree, Veterinary Medicine entered directly into degree-related, full-time employment. Graduates in Optometry, Law and Dentistry were, in contrast, substantially less likely to report degree-related employment than first-professionals in the other degree fields. This was especially true for Dentistry, where there was a substantial amount of employment outside of the degree field (10.9%), unemployment (1.9%), advanced degree work (28.5%), Military Service (8.8%) and other activity (0.8%).

Full-Time Degree-Related Employment of First-Professional Degree Graduates in the Civilian Labor Market

When the definition of degree-related employment is narrowed to consider only those graduates who are either employed or are seeking employment in the Civilian Labor Market, Table 5.02 gives a somewhat different picture. This table reflects what happened to those first-professional graduates who sought employment rather than go on for an advanced degree or engage in activities unrelated to either employment or the seeking of employment.

Viewed in this context, it is clear that, with the exceptions of Law, Optometry, and, in particular, Dentistry, first-professional graduates who entered the Civilian Labor Market in 1984 almost invariably found full-time, degree-related positions.

First-Professional Degree Graduates Employed Full-Time in Pennsylvania

Some concern is often expressed about what proportion of Pennsylvania's full-time employed, first-professional graduates remain in Pennsylvania to practice their profession. While this study can not answer this question over the longer periods of internship and specialized training that characterize these professions, it can give some idea of where they have found their initial employment (or internship, if reported as degree-related employment). Table 5.03, below, therefore ranks the first-professional degree fields of Table 5.0 according to the percentage of full-time Pennsylvania employment of first-professional graduates.

TABLE 5.01

A RANK ORDERING OF FIRST PROFESSIONAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES FINDING FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Pharmacy	100.0*	100.0*
2	Podiatry	99.1	100.0
3	Osteopathic Medicine	99.0	93.7
4	Medicine	98.5	97.8
5	Veterinary Medicine	96.3	96.4
-	All Graduates	85.4	81.1
6	Law	84.9	77.1
7	Optometry	80.9	90.2
8	Dentistry	49.1	57.3

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED STUDENTS (N-7).

TABLE 5.02

A RANK ORDERING OF FIRST PROFESSIONAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES IN THE CIVILIAN LABOR MARKET WHO FOUND FULL-TIME EMPLOYMENT RELATED TO THEIR FIELD OF PREPARATION

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
3	Medicine	100.0	99.8
3	Osteopathic Medicine	100.0	100.0
3	Pharmacy	100.0*	100.0*
3	Podiatry	100.0	100.0*
3	Veterinary Medicine	100.0	100.0
-	All Graduates	94.7	91.9
6	Law	91.2	79.8
7	Optometry	88.9	92.3
8	Dentistry	79.3	95.0

*THESE MAJOR DISCIPLINES HAD TEN OR FEWER REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

TABLE 5.03

A RANK ORDERING OF FIRST-PROFESSIONAL MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF FULL-TIME EMPLOYED 1983-84 GRADUATES WHO FOUND EMPLOYMENT IN PENNSYLVANIA

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Osteopathic Medicine	72.9	66.3
2	Law	65.4	60.6
3	Dentistry	63.6	66.2
-	All Graduates	57.7	57.4
4	Podiatry	51.3	50.0*
5.5	Medicine	50.0	54.2
5.5	Pharmacy	50.0*	57.1*
7	Optometry	49.3	80.5
8	Veterinary Medicine	41.7	43.9

*THESE MAJOR DISCIPLINES HAD LESS THAN TEN REPORTED FULL-TIME EMPLOYED GRADUATES.

Table 5.03 indicates that graduates in Optometry, Law, and Dentistry, had a definite tendency to find Pennsylvania based employment while graduates in Optometry, Pharmacy, Medicine, Podiatry and in particular, Veterinary Medicine tended to be characterized by a substantial amount of employment outside of Pennsylvania. These findings possibly reflect the realities of supply and demand relative to Pennsylvania's needs in 1984. The decline in Pennsylvania-based employment for Podiatry in 1984 over 1983 is noteworthy in this regard.

Unemployed First-Professional Degree Graduates in the Civilian Labor Market

As might be expected, there was virtually no reported unemployment at this degree level (Table 5.04). Only graduates in Law (5.9 percent), Optometry (2.5%), and Dentistry (3.0 percent) experienced any Civilian Labor Market unemployment.

First-Professional Degree Graduates Pursuing an Advanced Degree

Although, the first-professional degree is ordinarily considered to be a terminal degree, many of these graduates were reported as pursuing some form of graduate training (Table 5.05). This is particularly true for graduates in Dentistry who may immediately move on to working toward a speciality degree. In Table 5.05, some postdoctoral work has been reported for all but three of the degree fields. Only the fields of Pharmacy, Osteopathic Medicine and Podiatry were not reported as having graduates engaged in a postdoctoral education program.

TABLE 5.04

A RANK ORDERING OF FIRST PROFESSIONAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF UNEMPLOYED 1983-84 GRADUATES IN THE CIVILIAN LABOR MARKET

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Law	5.9	5.0
2	Dentistry	3.0	1.8
3	Optometry	2.5	0.0
-	All Graduates	2.0	2.0
6	Medicine	.0	0.0
6	Osteopathic Medicine	.0	0.0
6	Pharmacy	.0*	0.0*
6	Podiatry	.0	0.0*
6	Veterinary Medicine	.0	0.0

*THESE MAJOR DISCIPLINES HAD LESS THAN TEN REPORTED GRADUATES IN THE CIVILIAN LABOR MARKET.

TABLE 5.05

A RANK ORDERING OF FIRST PROFESSIONAL DEGREE MAJOR DISCIPLINES ACCORDING TO THE PERCENTAGE OF 1983-84 GRADUATES PURSUING AN ADVANCED DEGREE

RANK	MAJOR DISCIPLINE	1984 (%)	1983 (%)
1	Dentistry	28.5	28.9
-	All Graduates	5.7	8.6
2	Veterinary Medicine	3.7	3.6
3	Optometry	2.2	2.2
4	Law	0.9	1.7
5	Medicine	0.3	0.3
7	Osteopathic Medicine	0.0	0.0
7	Pharmacy	0.0*	0.0*
7	Podiatry	0.0	0.0

*THESE MAJOR DISCIPLINES HAD LESS THAN TEN REPORTED GRADUATES.

SOME COMMENTS ON THE FINDINGS FOR FIRST-PROFESSIONAL DEGREE GRADUATES

The overall picture for first-professional graduates is still one of a high level of degree-related employment with substantial proportions finding employment in Pennsylvania. There is also, however, continued evidence for a possible softening of employment demand for graduates in the field of Dentistry.

XII. POSTGRADUATE ACTIVITY TRENDS

This section of the report attempts to summarize the changes that have occurred in selected postgraduate activity measures over time. It will deal first with the question of what changes have there been for graduates at each degree level and then attempt to indicate what changes have taken place with respect to specific major higher education disciplines at each degree level.

Postgraduate Activity Trends by Type of Degree

Figure 1, on the following page, is an attempt to summarize time trends, at each degree level, with regard to the proportion of full-time employed graduates finding degree-related employment upon graduation.

As can be seen in Figure 1, a majority of the graduates obtained degree-related employment when they succeeded in finding a full-time position. This occurred at every degree level. The rates for bachelor's degree graduates and for first-professional degree graduates have risen and held reasonably steady while, in contrast, there has been a pattern of decline in degree-related employment for the other degrees.

Figure 2, on the other hand, addresses the question of change in the incidence of degree-related employment among those who had entered the Civilian Labor Market in search of employment. As can be seen in Figure 2, there was an increase in this measure at all degree levels up until 1979 or 1980 when a pattern of decline began, largely as a result of the recent recession. These declines are most noticeable in the case of the associate degree graduates, the baccalaureate degree graduates, and the master's degree graduates.

Figure 3 addresses the question of changes over time in the rate of full-time employment in Pennsylvania obtained by those who had full-time employment in or out of the State.

The general picture in Figure 3 is one of an overall decline in the rate of Pennsylvania based employment with the exception of the rates for Pennsylvania's first-professional graduates. The decline is particularly evident in the case of the baccalaureate and master's degree graduates.

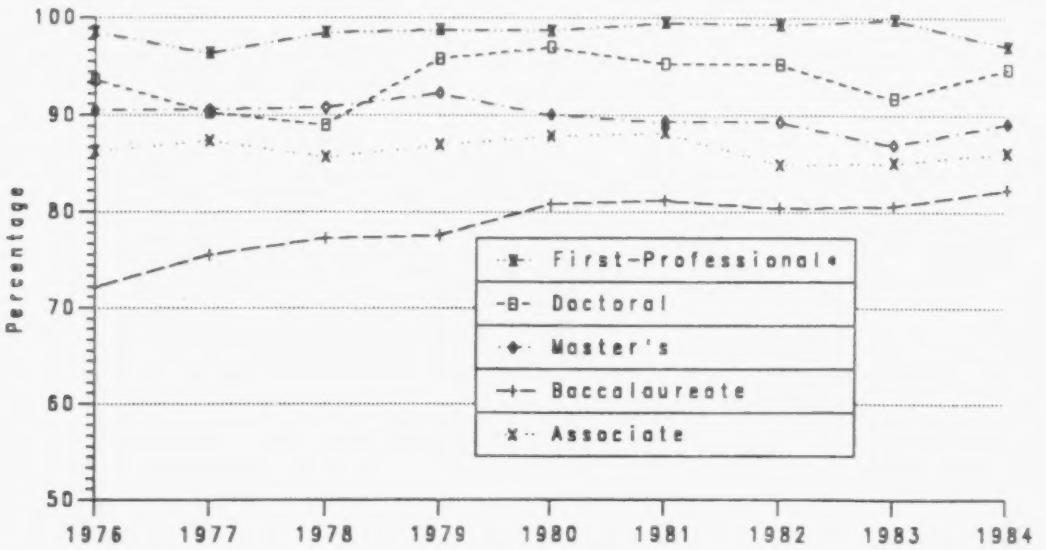
Figure 4 summarizes, for each degree level, changes in the proportion of graduates who went on to seek an advanced degree rather than enter the labor market. Here we see a strong decline in the case of associate degree graduates and a pattern of increase for the master's degree graduates. Presumably, this is due to the increasing emphasis upon vocationally oriented curricula at the associate degree level and a shift to the doctorate (rather than the master's degree) as the terminal degree of choice.

Postgraduate Activity Trends by Degree Program

As indicated in Section I of this report, the new classification system has not only permitted greater specificity within a program class but it has also, in many instances, completely changed the old designations used for some

FIGURE 1

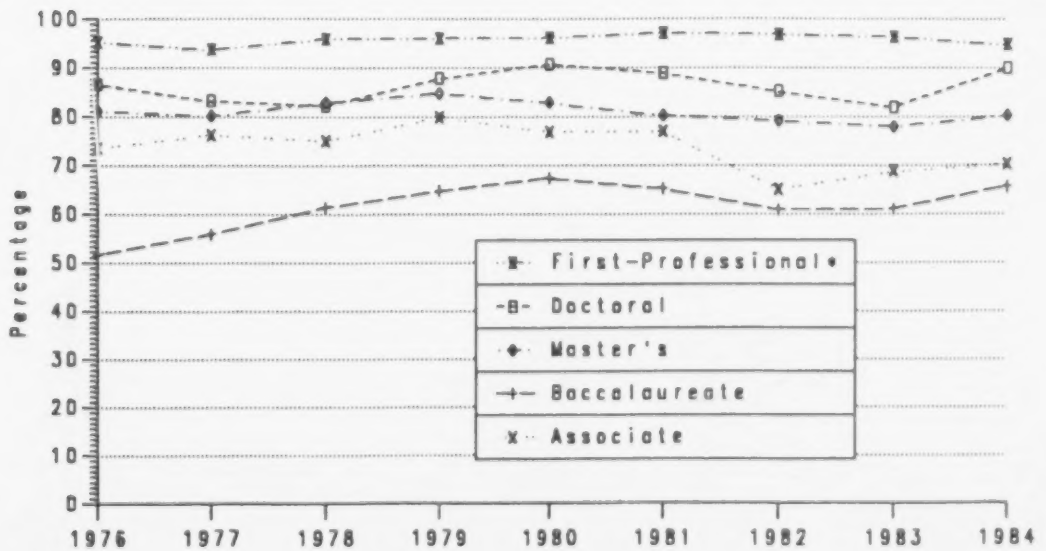
PERCENTAGE OF FULL-TIME EMPLOYED WITH DEGREE-RELATED EMPLOYMENT 1976-1984



*Includes interning Podiatry graduates

FIGURE 2

DEGREE-RELATED FULL-TIME CIVILIAN LABOR MARKET EMPLOYMENT 1976-1984



*Includes interning Podiatry graduates

FIGURE 3

PERCENTAGE OF FULL-TIME EMPLOYED WITH EMPLOYMENT IN PENNSYLVANIA 1976-1984

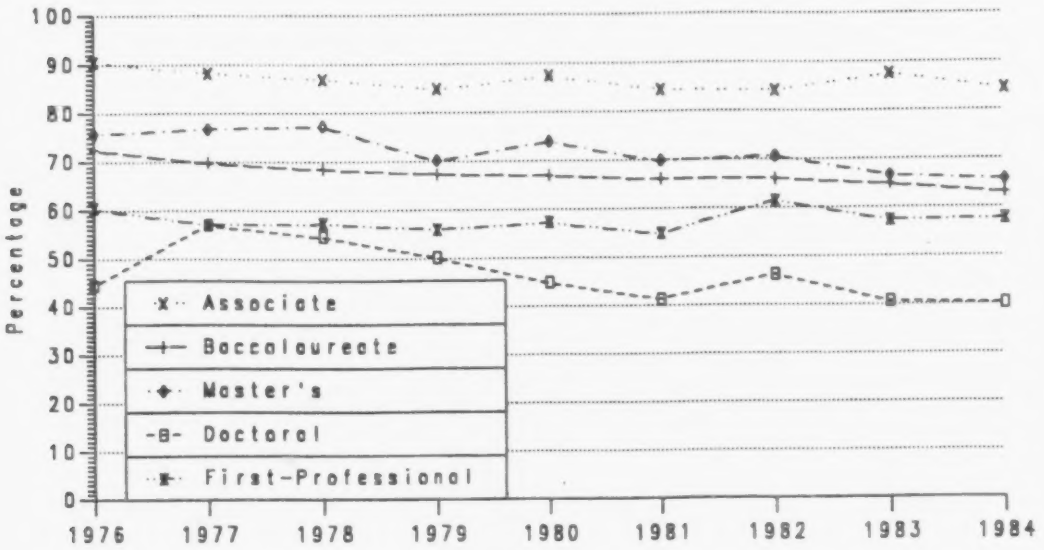
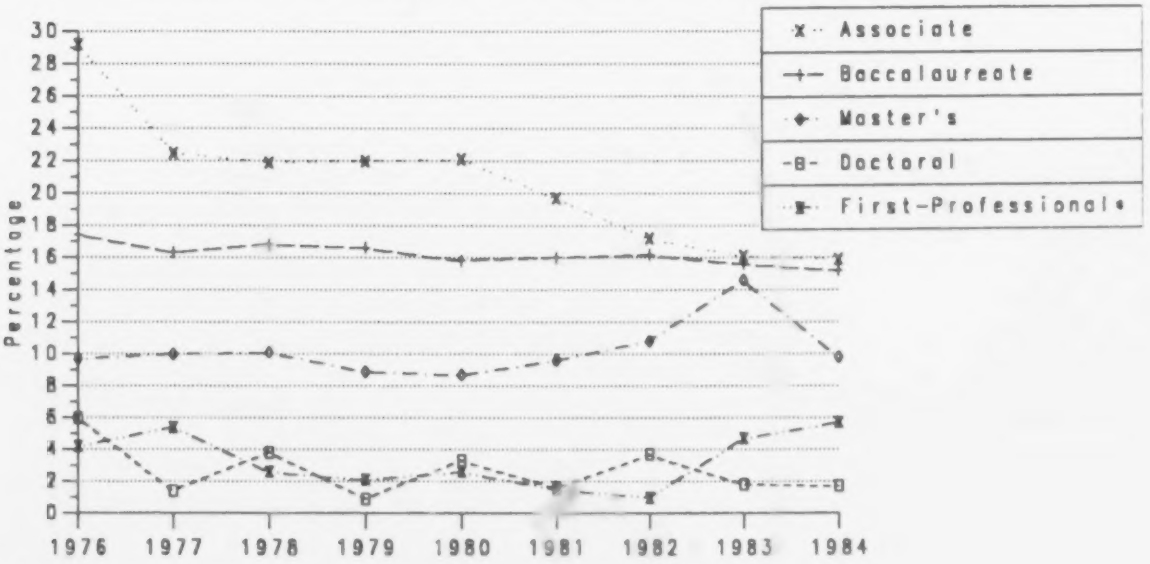


FIGURE 4

TRENDS IN THE PURSUIT OF AN ADVANCED DEGREE 1976-1984



*Does not include interning Podiatry graduates

of the degree fields and has, in some instances, broken a major degree field apart by placing specific degree fields in widely different categories. As a result, it is not possible, at present, to show degree field trends at the two-year associate degree level because of the magnitude of the changes that had been made in the classification of programs that are typically associated with the two-year degree. Fortunately, however, it has been possible to create tables showing changes over the years 1977, 1980, and 1984 for the higher level degrees by using those CIP codes that can be clearly crosswalked from the old HEGIS system and by combining CIP categories, where necessary, to approximate the older HEGIS categories. The results of this effort are to be found below in Tables 6.0 through 6.3.

Baccalaureate Postgraduate Activity by Degree Program, 1977, 1980, and 1984

Table 6.0 provides a comparison of results over time for baccalaureate graduates with regard to the proportion of full-time, degree-related employment overall and in the Civilian Labor Market and with regard to the proportion of full-time employed baccalaureate graduates whose employment was in Pennsylvania rather than outside of Pennsylvania.

As shown in Table 6.0, the following baccalaureate degree fields experienced a steady increase in degree-related employment during the same time intervals:

	1977	1980	1984
Biological Sciences	36.7%	53.2%	55.3%
Interdisciplinary Studies	37.9%	42.7%	53.6%
Foreign Languages	27.1%	30.7%	38.3%
Social Sciences	39.3%	38.9%	48.5%
Fine and Applied Arts	45.6%	49.9%	52.2%
Liberal Arts and Letters	37.7%	40.4%	41.8%

Some of the baccalaureate degree fields of Table 6.0 suffered a decline in 1980 followed by a rebound to a level higher than that for 1977.

	1977	1980	1984
Communications	49.4%	48.0%	55.2%
Library Science	67.5%	65.0%	70.9%

Seven baccalaureate degree fields had a pattern of gain in 1980 and then decline to a 1984 value above that for 1977.

	1977	1980	1984
Home Economics	53.3%	73.8%	73.2%
Architecture and Environmental Design	67.1%	86.7%	79.9%
Area and Ethnic Studies	14.3%	25.0%	22.2%
Agriculture and Natural Resources	58.2%	66.2%	65.4%
Business and Management	64.7%	73.4%	72.0%
Public Affairs and Services	48.8%	56.8%	55.3%

TABLE 6.0

A COMPARISON OVER TIME OF BACCALAUREATE GRADUATE RATES OF FULL-TIME EMPLOYMENT IN THE FIELD OF PREPARATION AND IN PENNSYLVANIA 1977 TO 1984

DEGREE PROGRAM	EMPLOYED IN FIELD[1]			EMPLOYED IN PENNSYLVANIA[2]		
	1977	1980	1984	1977	1980	1984
	(%)	(%)	(%)	(%)	(%)	(%)
Agriculture and Natural Resources	50.8 (58.2)	56.8 (66.2)	57.4 (65.4)	61.6	61.7	57.3
Architecture and Environmental Design	56.4 (67.1)	72.9 (86.7)	7.15 (79.9)	61.4	55.4	53.1
Area and Ethnic Studies	10.5 (14.3)	17.9 (25.0)	17.1 (22.2)	52.6	68.4	45.5
Biological Sciences	20.1 (36.7)	26.7 (53.2)	23.1 (55.3)	69.9	70.6	66.4
Business and Management	59.2 (64.7)	68.0 (73.4)	65.4 (70.0)	72.8	70.0	67.6
Communications	46.1 (49.4)	45.0 (48.0)	49.9 (55.2)	69.6	69.5	64.3
Computer and Information Sciences	79.4 (87.5)	86.2 (90.2)	70.9 (75.9)	72.5	57.6	62.9
Education	48.2 (60.6)	57.7 (63.6)	54.2 (61.8)	74.4	71.1	69.5
Engineering	77.7 (86.1)	86.5 (93.5)	70.1 (79.9)	46.6	44.9	38.2
Fine and Applied Arts	37.5 (45.6)	41.5 (49.9)	42.7 (52.2)	64.1	67.2	59.9
Foreign Languages	19.4 (27.1)	24.0 (30.7)	26.9 (38.3)	54.4	64.2	48.2
Health Professions	80.9 (85.4)	88.0 (93.5)	74.7 (84.8)	80.6	81.9	74.6
Home Economics	45.7 (53.3)	66.0 (73.8)	63.5 (73.2)	74.1	69.1	63.8

TABLE 6.0 (Continued)

DEGREE PROGRAM	EMPLOYED IN FIELD[1] 1977	1980	1984	EMPLOYED IN PENNSYLVANIA[2] 1977	1980	1984
	(%)	(%)	(%)	(%)	(%)	(%)
Interdisciplinary Studies	26.9 (37.9)	31.5 (42.7)	36.4 (53.6)	68.1	67.0	62.1
Law	37.5 (75.0)	16.2 (42.9)	22.0 (54.2)	100.0	23.1	20.0
Liberal Arts and Letters	27.3 (37.4)	30.4 (40.4)	31.8 (41.8)	64.9	66.8	56.9
Library Science	61.7 (67.5)	58.2 (65.0)	56.6 (70.9)	76.8	90.6	47.4
Mathematics	54.0 (70.1)	66.3 (80.4)	52.0 (70.1)	68.6	60.3	50.4
Physical Sciences	29.2 (61.5)	38.4 (69.6)	29.6 (58.4)	61.1	53.8	56.8
Psychology	27.8 (37.7)	30.0 (41.1)	16.1 (39.1)	72.6	70.0	70.8
Public Affairs and Services	44.3 (48.8)	50.9 (56.8)	44.3 (55.3)	78.0	73.0	73.2
Social Sciences	28.6 (39.3)	28.1 (38.9)	32.4 (48.5)	66.1	65.8	58.1
Philosophy, Religion and Theology	32.9 (48.6)	38.4 (56.9)	32.1 (48.7)	51.7	65.6	59.7
ALL REPORTED GRADUATES	46.8 (55.9)	56.8 (67.4)	51.8 (65.6)	69.9	67.0	63.1

[1]The percentage value shown in parentheses represents a percentage of those graduates who entered the Civilian Labor Market, i.e., seeking a position or working part-time or full-time. The upper figure represents a proportion (%) of all reported graduates.

[2]The percentage figures shown here represent the proportion of full-time employed graduates who were employed full-time in Pennsylvania.

In contrast, four baccalaureate degree fields had a pattern of decline to a 1984 level below that of 1977.

	1977	1980	1984
Law	75.0%	42.9%	54.2%
Computer and Information Sciences	87.5%	90.2%	75.9%
Engineering	86.1%	93.5%	79.9%
Physical Sciences	61.5%	69.6%	58.4%

These declines are very possibly a continued result of the recent economic recession and related budget constraints.

Five of the degree fields of Table 6.0 had a pattern of no appreciable change over time between 1977 and 1984:

	1977	1980	1984
Education	60.6%	63.6%	61.8%
Health Profession	85.4%	93.5%	84.8%
Mathematics	70.1%	80.4%	70.1%
Philosophy, Religion, and Theology	48.6%	56.9%	48.7%
Psychology	37.7%	41.1%	39.1%

With regard to employment in Pennsylvania, only the baccalaureate degree fields of Philosophy, Religion, and Theology in Table 6.0 had a pattern of increase rather than decline.

Master's Degree Postgraduate Activity by Degree Program, 1977, 1980, and 1984

Table 6.1 provides a comparison of results over time for master's degree graduates with regard to the proportion of full-time, degree-related employment overall and in the Civilian Labor Market and with regard to the proportion of full-time employed graduates finding employment in Pennsylvania.

Of the twenty-three degree fields of Table 6.1, four had a pattern of steady decline in degree-related Civilian Labor Market employment over the years 1977, 1980, and 1984:

	1977	1980	1984
Home Economics	80.0%	60.0%	22.2%
Computer and Information Sciences	95.7%	92.0%	84.1%
Education	83.1%	78.9%	78.6%
Engineering	93.4%	92.7%	90.3%

Three degree fields had a stable pattern or a pattern of increase which was then followed by a decline to a level below that of 1977:

	1977	1980	1984
Philosophy, Religion, and Theology	100.0%	100.0%	47.1%
Law	90.0%	100.0%	79.5%
Fine and Applied Arts	59.7%	72.0%	56.9%

TABLE 6.1

A COMPARISON OVER TIME OF MASTER'S DEGREE GRADUATE
RATES OF FULL-TIME EMPLOYMENT IN THE
FIELD OF PREPARATION AND IN PENNSYLVANIA 1977 TO 1984

DEGREE PROGRAM	EMPLOYED IN FIELD[1]			EMPLOYED IN PENNSYLVANIA[2]		
	1977	1980	1984	1977	1980	1984
	(%)	(%)	(%)	(%)	(%)	(%)
Agriculture and Natural Resources	34.8 (66.7)	55.0 (78.6)	48.3 (70.0)	55.5	50.0	50.0
Architecture and Environmental Design	76.9 (83.3)	68.8 (73.3)	93.3 (93.3)	56.5	76.9	60.0
Area and Ethnic Studies	0.0 (0.0)	20.0 (50.0)	57.1 (100.0)	100.0	100.0	100.0
Biological Sciences	54.5 (74.0)	52.5 (80.5)	60.3 (84.5)	67.2	61.8	57.5
Business and Management	80.7 (85.8)	84.1 (89.0)	80.6 (86.5)	65.8	71.8	57.8
Communications	64.3 (69.2)	86.1 (91.2)	69.7 (69.7)	55.9	54.5	63.9
Computer and Information Sciences	81.5 (95.7)	73.0 (92.0)	71.2 (84.1)	47.8	78.8	52.6
Education	77.4 (83.1)	76.1 (78.9)	73.3 (78.6)	87.4	83.7	79.2
Engineering	74.4 (93.4)	75.4 (92.7)	65.3 (90.3)	48.7	55.7	32.7
Fine and Applied Arts	56.6 (59.7)	69.2 (72.0)	49.3 (56.9)	74.5	65.0	46.3
Foreign Languages	34.4 (50.0)	55.0 (64.7)	63.7 (87.5)	53.3	41.7	57.1
Health Professions	63.5 (69.6)	90.9 (94.0)	84.2 (87.3)	73.9	75.7	64.2
Home Economics	26.7 (80.0)	27.3 (60.0)	18.2 (22.2)	25.0	66.7	66.7
Interdisciplinary Studies	75.0 (75.0)	73.7 (80.0)	75.9 (88.0)	76.5	75.8	76.0

TABLE 6.1 (Continued)

DEGREE PROGRAM	EMPLOYED IN FIELD[1] 1977	1980	1984	EMPLOYED IN PENNSYLVANIA[2] 1977	1980	1984
	(%)	(%)	(%)	(%)	(%)	(%)
Law	90.0 (90.0)	97.3 (100.0)	63.6 (79.5)	85.0	37.5	68.8
Liberal Arts and Letters	38.6 (50.0)	64.2 (81.3)	57.4 (68.6)	73.5	60.0	77.3
Library Science	56.4 (57.9)	58.7 (58.7)	76.7 (79.3)	78.6	90.0	50.0
Mathematics	66.1 (78.0)	59.5 (80.6)	54.5 (85.7)	63.6	55.5	44.4
Physical Sciences	60.0 (76.2)	63.6 (88.7)	46.8 (78.6)	54.5	64.2	52.8
Psychology	48.1 (66.1)	75.4 (88.4)	43.6 (73.9)	81.6	73.0	68.8
Public Affairs and Services	70.5 (73.7)	73.3 (75.7)	64.9 (77.1)	39.3	65.5	72.3
Social Sciences	50.4 (63.9)	62.0 (74.7)	42.7 (67.3)	79.5	58.4	55.8
Philosophy, Religion, and Theology	100.0 (100.0)	92.6 (100.0)	21.1 (47.1)	4.4	100.0	40.0
ALL REPORTED GRADUATES	72.1 (80.2)	75.7 (82.9)	68.2 (80.2)	76.8	74.0	65.7

[1]The figures in parentheses represents a percentage of those graduates who entered the Civilian Labor Market, i.e, seeking a position or working part-time or full-time. The upper figure represents a proportion (%) of all reported graduates.

[2]The percentage figures shown here represent the proportion of full-time employed graduates who were employed full-time in Pennsylvania.

Seven of the degree fields of Table 6.1 had a pattern of steady growth in degree-related Civilian Labor Market employment over this period:

	1977	1980	1984
Area and Ethnic Studies	0.0%	50.0%	100.0%
Foreign Languages	50.0%	64.7%	87.5%
Library Science	57.9%	58.7%	79.3%
Interdisciplinary Studies	75.0%	80.0%	88.0%
Biological Sciences	74.0%	80.5%	84.5%
Mathematics	78.0%	80.6%	85.7%
Public Affairs and Sciences	73.7%	75.7%	77.1%

One degree field was characterized by a decline in 1980 followed by an increase to a 1984 level higher than that for 1977 graduates

	1977	1980	1984
Architecture and Environmental Design	83.3%	73.3%	93.3%

Six degree fields in Table 6.1 experienced a gain between 1977 and 1980 followed by a decline in 1984 to a level of degree-related Civilian Labor Market employment that is still higher than that found for the graduates of 1977:

	1977	1980	1984
Liberal Arts and Letters	50.0%	81.3%	68.6%
Health Professions	69.6%	94.0%	87.3%
Psychology	66.1%	88.4%	73.9%
Social Sciences	63.9%	74.7%	67.3%
Agriculture and Natural Resources	66.7%	78.6%	70.0%
Physical Sciences	76.2%	88.7%	78.6%

Two degree fields in Table 6.1 experienced no appreciable change in 1984 degree-related Civilian Labor Market employment compared with that experienced by the graduates of 1977:

	1977	1980	1984
Business and Management	85.8%	89.0%	86.5%
Communications	69.2%	91.2%	69.7%

With regard to the proportion of full-time employed master's degree graduates finding employment in Pennsylvania, seven degree fields experienced an overall increase between 1977 and 1984 and two, Area Studies and Interdisciplinary Studies had the same rate in 1984 as for the 1977 graduates. The nine degree fields with an increase in Pennsylvania based employment were: Communications, Home Economics, Public Affairs and Services, Architecture and Environmental Design, Computer and Information Sciences, Foreign Languages, and Liberal Arts and Letters.

The rest of the degree fields (N-14) in Table 6.1 were characterized by a pattern of overall decline with Agriculture and Natural Resources, Biological Sciences, Education, Fine and Applied Arts, Mathematics, Psychology, and Social Sciences graduates experiencing a steady decline from 1977 to 1980 to 1984.

Doctoral Degree Postgraduate Activity by Degree Program, 1977, 1980, and 1983

Table 6.2 presents, in a similar manner, findings for doctoral degree graduates at three year intervals, i.e., 1977, 1980, and 1984:

In Table 6.2, five degree fields had a pattern of steady gain over this period:

	1977	1980	1984
Liberal Arts and Letters	62.5%	80.8%	95.7%
Education	78.8%	85.6%	93.1%
Health Professions	85.7%	96.3%	100.0%
Public Affairs and Services	88.9%	100.0%	100.0%
Business and Management	92.9%	100.0%	100.0%

Two degree fields were also found to fit this pattern but the patterns are based on only one graduate for 1984, i.e.,

	1977	1980	1984
Fine and Applied Arts	78.6%	66.7%	100.0%
Foreign Languages	80.0%	50.0%	100.0%

Three degree fields in Table 6.2 had no overall change in the level of degree-related Civilian Labor Market employment during this period:

	1977	1980	1984
Computer and Information Sciences	100.0%	100.0%	100.0%
Interdisciplinary Studies	100.0%	100.0%	NR
Mathematics	100.0%	85.7%	100.0%

None of the degree fields in Table 6.2 experienced a steady decline over these years, but five of the degree fields of Table 6.2 were characterized by an increase in the rate of degree-related Civilian Labor Market employment in 1980 followed by a decline in 1984 to a rate below that for the graduates of 1977:

	1977	1980	1984
Psychology	80.0%	94.7%	72.4%
Physical Sciences	90.7%	93.3%	82.9%
Biological Sciences	83.7%	97.6%	77.4%
Engineering	95.7%	97.4%	92.4%
Social Sciences	74.5%	94.7%	72.7%

One degree field, Home Economics, experienced a decline between 1977 and 1980 with a very slight gain in 1984 over 1980:

	1977	1980	1984
Home Economics	100.0%	80.0%	83.3%

With regard to the rate of Pennsylvania employment (Table 6.2) for those who found full-time employment, only four degree fields had a pattern of an increase in Pennsylvania employment between 1977 and 1984. These four degree fields were: Agriculture and Natural Resources, Business and Management, Fine and Applied Arts, and Social Sciences. The general overall pattern is one of reduced Pennsylvania employment at the doctoral graduate level.

TABLE 6.2

A COMPARISON OVER TIME OF DOCTORAL DEGREE GRADUATE
RATES OF FULL-TIME EMPLOYMENT IN THE
FIELD OF PREPARATION AND IN PENNSYLVANIA 1977 TO 1984

DEGREE PROGRAM	EMPLOYED IN FIELD[1]			EMPLOYED IN PENNSYLVANIA[2]		
	1977	1980	1984	1977	1980	1984
	(%)	(%)	(%)	(%)	(%)	(%)
Agriculture and Natural Resources	90.0 (90.0)	80.0 (80.0)	100.0 (100.0)	11.1	20.0	16.7
Architecture and Environmental Design	NR[4] (NR)	NR[4] (NR)	100.0 (100.0)	NR[4]	NR[4]	0.0
Area and Ethnic Studies	NR[4] (NR)	NR[4] (NR)	0.0 (0.0)	NR[4]	NR[4]	0.0
Biological Sciences	78.3 (83.7)	83.7 (97.6)	72.7 (77.4)	43.6	36.6	29.6
Business and Management	92.9 (92.9)	100.0 (100.0)	100.0 (100.0)	14.3	20.0	18.8
Computer and Information Sciences	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	22.2	40.0	14.3
Education	78.3 (78.8)	84.4 (85.6)	90.4 (93.1)	84.1	59.1	56.4
Engineering	95.7 (95.7)	97.4 (97.4)	90.7 (92.4)	45.5	26.3	40.8
Fine and Applied Arts	78.6 (78.6)	66.7 (66.7)	100.0[3] (100.0)	63.6	50.0	100.0[3]
Foreign Languages	80.0 (80.0)	50.0 (50.0)	100.0[3] (100.0)	77.8	100.0	0.0[3]
Health Professions	85.7 (85.7)	86.7 (96.3)	99.0 (100.0)	66.7	46.2	48.5
Home Economics	100.0 (100.0)	80.0 (80.0)	83.3 (83.3)	66.7	0.0	0.0
Interdisciplinary Studies	100.0 (100.0)	100.0 (100.0)	NR[4] (NR)	100.0	100.0	NR[4]
Liberal Arts and Letters	62.5 (62.5)	80.8 (80.8)	95.7 (95.7)	65.0	28.6	26.1

TABLE 6.2 (Continued)

DEGREE PROGRAM	EMPLOYED IN FIELD[1] 1977	1980	1984	EMPLOYED IN PENNSYLVANIA[2] 1977	1980	1984
	(%)	(%)	(%)	(%)	(%)	(%)
Mathematics	93.8 (100.0)	85.7 (85.7)	93.8 (100.0)	40.0	66.7	26.7
Physical Sciences	81.9 (90.7)	90.3 (93.3)	77.3 (82.9)	45.1	33.3	20.5
Psychology	76.2 (80.0)	94.7 (94.7)	70.6 (70.6)	47.1	33.3	31.3
Public Affairs and Services	88.9 (88.9)	100.0 (100.0)	100.0 (100.0)	25.0	25.0	20.0
Social Sciences	74.5 (74.5)	94.7 (94.7)	72.7 (72.7)	31.8	77.8	50.0
ALL REPORTED GRADUATES	82.0 (83.2)	87.7 (90.7)	87.4 (89.9)	57.0	44.9	40.3

[1]The figures in parentheses represents a percentage of those graduates who entered the Civilian Labor Market, i.e, those seeking a position or working part-time or full-time. The upper figure represents a proportion (%) of all reported graduates.

[2]The percentage figures shown here represent the proportion of full-time employed graduates who were employed full-time in Pennsylvania.

[3]Only one graduate reported for 1984.

[4]NR = Not Reported, i.e., there were no reported graduates for this degree program.

First-Professional Postgraduate Activity by Degree Program, 1977, 1980, and 1984

Table 6.3 indicates the patterns of change for the first-professional degree fields over two three year intervals, i.e., for the years 1977, 1980, and 1984.

No change in the rate of full-time, degree-related Civilian Labor Market first-professional employment was noted over these years for the degree fields of:

	1977	1980	1984
Medicine	99.9%	100.0%	100.0%
Osteopathy	100.0%	100.0%	100.0%
Pharmacy	100.0%	NA	100.0%
Podiatry	100.0%	100.0%	100.0%

One first-professional degree field was characterized by growth in 1984 following a decline in degree-related Civilian Labor Market employment in 1980 with no overall change in the rate of employment between 1977 and 1984:

	1977	1980	1984
Veterinary Medicine	100.0%	94.7%	100.0%

One degree field had a pattern of growth in 1984 following a period of decline through 1983:

	1977	1980	1984
Law	84.0%	88.1%	91.2%

Finally, two first-professional degree fields had a pattern of continual decline:

	1977	1980	1984
Dentistry	100.0%	99.1%	79.4%
Optometry	96.8%	95.2%	88.8%

With regard to the employment of first-professionals in Pennsylvania, there were five degree fields whose full-time employed graduates had a pattern of increasing full-time employment in Pennsylvania, i.e., Medicine (47.2 to 50.0%), Osteopathic Medicine (50.5 to 72.9%), Optometry (46.2 to 49.3%), Pharmacy (0.0 to 50.5%), and Podiatric Medicine (46.3 to 51.37%). Three fields show a pattern of an overall decline in Pennsylvania based employment, i.e., Law (68.0% to 65.4%), Dentistry (71.2% to 63.6%) and Veterinary Medicine (46.0% to 41.7%) between 1977 and 1984. It should be noted, however, that the decline for 1984's Veterinary Medicine and Dentistry followed upon substantially high rates of Pennsylvania employment for the graduates of 1983 in these same fields.

TABLE 6.3

A COMPARISON OF FIRST-PROFESSIONAL DEGREE GRADUATE
RATES OF FULL-TIME EMPLOYMENT IN THE FIELD OF PREPARATION
AND IN PENNSYLVANIA 1977 TO 1984

DEGREE PROGRAM	EMPLOYED IN FIELD[1]			EMPLOYED IN PENNSYLVANIA[2]		
	1977	1980	1984	1977	1980	1984
	(%)	(%)	(%)	(%)	(%)	(%)
Dentistry	89.0 (100.0)	82.2 (99.1)	49.0 (79.4)	71.2	78.4	63.6
Medicine	90.0 (99.9)	99.9 (100.0)	97.4 (100.0)	47.2	51.4	50.0
Optometry	96.8 (96.8)	94.0 (95.2)	80.8 (88.8)	46.2	35.0	49.3
Osteopathic Medicine	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	50.5	58.9	72.9
Pharmacy[3]	100.0 (100.0)	NA (NA)	100.0 (100.0)	0.0	NR	50.0
Podiatry	100.0 (100.0)	100.0 (100.0)	100.0 (100.0)	46.3	50.5	51.3
Veterinary Medicine	89.7 (100.0)	85.7 (94.7)	96.3 (100.0)	46.0	94.7	41.7
Law	82.6 (84.0)	86.8 (88.1)	84.9 (91.2)	68.0	63.1	65.4
ALL REPORTED GRADUATES	88.6 (93.7)	93.8 (96.2)	85.4 (94.7)	57.1	57.3	57.7

[1]The figures in parentheses represents a percentage of those graduates who entered the Civilian Labor Market, i.e, seeking a position or working part-time or full-time. The upper figure represents a proportion (%) of all reported graduates.

[2]The percentage figures shown here represent the proportion of full-time employed graduates who were employed in Pennsylvania.

[3]Data on Pharmacy and Veterinarian graduates of 1977 and 1980 were not available. Data for the graduates of 1978 and 1981 were therefore substituted wherever possible.

XII. SOME COMMENTS ON THESE OBSERVED TRENDS

The results presented in Section XII of this report reflect the impact of changes over the last six years in federal priorities and the impact of the recent economic recession and recovery. If the economy continues to improve, or new priorities enter into the picture, the picture shown here will improve further. If the predicted decline in the number of graduates occurs as a result of the recent "Baby Bust" birth decline and the anticipated rise in retirements and deaths occurs as the post World War II generation continues to age, these trends may change from a picture of relative surplus in many fields to one of high unmet demand, especially in Education.

XIII. POSTGRADUATE ACTIVITY FINDINGS FOR EACH INSTITUTIONAL SECTOR

Pennsylvania has a complex higher education structure with a variety of funding sources and missions characterizing the different types of institution that exist in the state. As a consequence, various categories have been established in order to define institutional sectors according to their source of funding, their mission, and/or pattern of governance. This section of the report is designed to use these categories to provide data for the use of institutional planners who may wish to compare their own institution with other institutions in the same category. It should be remembered, however, that these institutional sectors are not necessarily homogenous and may contain institutions that vary widely in size and mission, e.g., the independent private colleges and universities.

Table 7.0 is a summarization of the postgraduate activity of graduates from the various sectors using the various measures that have been utilized in other sections of this report. The measures in Table 7.0 are derived from data in Tables 7.1 through 7.5, which follow. These tables, Tables 7.1 through 7.5, summarize postgraduate activity findings for the associate degree (Table 7.1), baccalaureate degree (Table 7.2), master's degree (Table 7.3), doctoral degree (Table 7.4), and first-professional degree (Table 7.5) graduates of 1983-84. As in Tables 1.0, 2.0, 3.0, 4.0, and 5.0 of this report, they list the number of graduates in each category of activity followed by the percentage the number of graduates in each category is of all reported graduates. Finally, the percentage of graduates in each of the Civilian Labor Market categories is obtained by excluding those who are in military service, those seeking an advanced degree or those engaged in other activities unrelated to employment or to the seeking of employment.

No attempt has been made here to present sector data with regard to individual degree fields. This has been done in order to keep the report within reasonable bounds. Those who have a need for such detailed information can, however, request a copy of one or more of the relevant unpublished tables (see Appendix B, Tables 2.1A through 2.8).

When the comparisons of Table 7.0 are examined, it becomes apparent that the 1984 associate degree graduates of the Proprietary Schools and of the State School of Technology had the highest rates of full-time, degree-related Civilian Labor Market employment, 82.9 and 84.1 percent, respectively, while the State System (78.7%) and the Private (79.1%) institutions led the college and university sectors. Similar observations concerning unemployment, pursuit of an advanced degree, or concerning the rate of Pennsylvania full-time employment can also be made using Table 7.0, e.g., 21.1 percent of associate degree graduates from the state-related universities were reported as unemployed in 1984.

At the baccalaureate fegree level, Table 7.0 indicates that the highest rate of reported full-time, degree-related Civilian Labor Market employment characterized the graduates of the state-aided colleges and universities (81.3%) with the other college and university sectors having somewhat lower rates that were essentially identical, i.e., centered around a value of 65 percent. The private colleges and universities reported the highest rate of Civilian Labor Market unemployment (14.9%) and the state-aided colleges and universities reported the lowest rate (2.2%). Similar analyses can be made of the other measures with regard to the baccalaureate graduates of 1984.

TABLE 7.0

A COMPARISON BY DEGREE LEVEL OF THE INSTITUTIONAL SECTORS WITH REGARD TO SELECTED MEASURES OF POSTGRADUATE ACTIVITY, 1984

	EMPLOYED FULL-TIME IN DEGREE FIELD (%)	LABOR MARKET EMPLOYMENT IN FIELD PREPARED* (%)	LABOR MARKET UNEMPLOYMENT* (%)	PURSUING ADVANCED DEGREE (%)	PERCENT FULL-TIME IN PENNSYLVANIA (%)
I. ASSOCIATE DEGREE					
STATE SYSTEM	70.6	78.7	9.8	10.3	75.5
STATE-RELATED	40.1	55.8	21.1	24.7	77.0
PRIVATE INSTITUTIONS	58.8	79.1	9.7	23.1	86.2
COMMUNITY COLLEGES	47.6	62.7	9.1	21.1	93.2
PROPRIETARY SCHOOLS	76.7	82.9	10.1	3.1	73.7
STATE SCHOOLS OF TECHNOLOGY	82.1	84.1	.0	2.4	100.0
II. BACHELOR"S DEGREE					
STATE SYSTEM	50.3	65.3	12.3	12.4	72.6
STATE-RELATED	54.9	63.8	13.7	11.7	59.8
STATE-AIDED	69.6	81.3	2.2	6.5	70.5
PRIVATE INSTITUTIONS	50.6	65.5	14.9	18.9	57.8
III. MASTER"S DEGREE					
STATE SYSTEM	72.0	79.7	6.1	4.4	75.1
STATE-RELATED	66.7	78.3	5.9	12.4	63.2
STATE-AIDED	80.0	94.1	.0	5.0	64.7
PRIVATE INSTITUTIONS	65.3	82.0	4.4	13.2	57.2
IV. DOCTORAL DEGREE					
STATE SYSTEM	100.0	100.0	.0	.0	20.0
STATE-RELATED	89.6	91.0	4.2	1.2	42.9
STATE-AIDED	85.7	100.0	.0	14.3	41.7
PRIVATE INSTITUTIONS	80.2	84.8	1.9	1.8	33.0
V. FIRST PROFESSIONAL DEGREE					
STATE-RELATED	86.5	100.0	.0	6.4	65.2
STATE-AIDED	86.5	94.5	1.6	6.6	48.8
PRIVATE INSTITUTIONS	79.8	89.1	6.1	1.4	86.1

* CIVILIAN LABOR MARKET

TABLE 7.1

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY INSTITUTIONAL SECTOR FOR ASSOCIATE DEGREE GRADUATES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
STATE SYSTEM	#	68	36	12	4	1	2	6	7	0	0
	%		52.9	17.6	5.9	1.5	2.9	8.8	10.3	.0	.0
	%	61	59.0	19.7	6.6	1.6	3.3	9.8			
STATE-RELATED	#	930	272	101	90	7	58	141	230	3	28
	%		29.2	10.9	9.7	.8	6.2	15.2	24.7	.3	3.0
	%	669	40.7	15.1	13.5	1.0	8.7	21.1			
PRIVATE INSTITUTIONS	#	611	311	48	27	6	18	44	141	0	16
	%		50.9	7.9	4.4	1.0	2.9	7.2	23.1	.0	2.6
	%	454	68.5	10.6	5.9	1.3	4.0	9.7			
COMMUNITY COLLEGES	#	6,645	2,928	234	718	30	674	459	1,403	28	171
	%		44.1	3.5	10.8	.5	10.1	6.9	21.1	.4	2.6
	%	5,043	58.1	4.6	14.2	.6	13.4	9.1			
PROPRIETARY SCHOOLS	#	3,608	2,022	746	165	33	35	337	113	33	124
	%		56.0	20.7	4.6	.9	1.0	9.3	3.1	.9	3.4
	%	3,338	60.6	22.3	4.9	1.0	1.0	10.1			
STATE SCHOOLS OF TECHNOLOGY	#	84	69	0	13	0	0	0	2	0	0
	%		82.1	.0	15.5	.0	.0	.0	2.4	.0	.0
	%	82	84.1	.0	15.9	.0	.0	.0			
TOTAL		11,946	5,638	1,141	1,017	77	787	987	1,896	64	339
			47.2	9.6	8.5	.6	6.6	8.3	15.9	.5	2.8
		9,647	58.4	11.8	10.5	.8	8.2	10.2			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 7.2

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY INSTITUTIONAL SECTOR FOR BACCALAUREATE DEGREE GRADUATES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
STATE SYSTEM	#	9,125	3,266	1,328	711	175	691	868	1,132	756	198
	%		35.8	14.6	7.8	1.9	7.6	9.5	12.4	8.3	2.2
	%	7,039	46.4	18.9	10.1	2.5	9.8	12.3			
STATE-RELATED	#	5,030	1,602	1,159	481	242	248	594	586	79	39
	%		31.8	23.0	9.6	4.8	4.9	11.8	11.7	1.6	.8
	%	4,326	37.0	26.8	11.1	5.6	5.7	13.7			
STATE-AIDED	#	942	473	183	57	39	37	18	61	1	73
	%		50.2	19.4	6.1	4.1	3.9	1.9	6.5	.1	7.7
	%	807	58.6	22.7	7.1	4.8	4.6	2.2			
PRIVATE INSTITUTIONS	#	14,404	4,197	3,085	932	656	592	1,663	2,716	185	378
	%		29.1	21.4	6.5	4.6	4.1	11.5	18.9	1.3	2.6
	%	11,125	37.7	27.7	8.4	5.9	5.3	14.9			
TOTAL		29,501	9,538	5,755	2,181	1,112	1,568	3,143	4,495	1,021	688
			32.3	19.5	7.4	3.8	5.3	10.7	15.2	3.5	2.3
		23,297	40.9	24.7	9.4	4.8	6.7	13.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 7.3

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY INSTITUTIONAL SECTOR FOR MASTER"S DEGREE GRADUATES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
STATE SYSTEM	#	1,087	578	205	86	15	38	60	48	20	37
	%		53.2	18.9	7.9	1.4	3.5	5.5	4.4	1.8	3.4
	%	982	58.9	20.9	8.8	1.5	3.9	6.1			
STATE-RELATED	#	869	357	223	45	11	61	44	108	5	15
	%		41.1	25.7	5.2	1.3	7.0	5.1	12.4	.6	1.7
	%	741	48.2	30.1	6.1	1.5	8.2	5.9			
STATE-AIDED	#	20	11	5	0	1	0	0	1	0	2
	%		55.0	25.0	.0	5.0	.0	.0	5.0	.0	10.0
	%	17	64.7	29.4	.0	5.9	.0	.0			
PRIVATE INSTITUTIONS	#	1,055	379	310	70	26	18	37	139	4	72
	%		35.9	29.4	6.6	2.5	1.7	3.5	13.2	.4	6.8
	%	840	45.1	36.9	8.3	3.1	2.1	4.4			
TOTAL		3,031	1,325	743	201	53	117	141	296	29	126
			43.7	24.5	6.6	1.7	3.9	4.7	9.8	1.0	4.2
		2,580	51.4	28.8	7.8	2.1	4.5	5.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 7.4

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY INSTITUTIONAL SECTOR FOR DOCTORAL DEGREE GRADUATES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
STATE SYSTEM	#	5	1	4	0	0	0	0	0	0	0
	%		20.0	80.0	.0	.0	.0	.0	.0	.0	.0
	%	5	20.0	80.0	.0	.0	.0	.0			
STATE-RELATED	#	338	130	173	4	5	7	14	4	0	1
	%		38.5	51.2	1.2	1.5	2.1	4.1	1.2	.0	.3
	%	333	39.0	52.0	1.2	1.5	2.1	4.2			
STATE-AIDED	#	14	5	7	0	0	0	0	2	0	0
	%		35.7	50.0	.0	.0	.0	.0	14.3	.0	.0
	%	12	41.7	58.3	.0	.0	.0	.0			
PRIVATE INSTITUTIONS	#	111	29	60	5	9	0	2	2	1	3
	%		26.1	54.1	4.5	8.1	.0	1.8	1.8	.9	2.7
	%	105	27.6	57.1	4.8	8.6	.0	1.9			
TOTAL		468	165	244	9	14	7	16	8	1	4
			35.3	52.1	1.9	3.0	1.5	3.4	1.7	.2	.9
		455	36.3	53.6	2.0	3.1	1.5	3.5			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

TABLE 7.5

POSTGRADUATE ACTIVITY AND CIVILIAN LABOR MARKET EMPLOYMENT STATUS BY INSTITUTIONAL SECTOR FOR FIRST PROFESSIONAL DEGREE GRADUATES, 1984

		TOTAL REPORTED	EMPLOYED IN FIELD PREPARED IN PA	EMPLOYED IN FIELD PREPARED OUTSIDE PA	EMPLOYED IN OTHER FIELD IN PA	EMPLOYED IN OTHER FIELD OUTSIDE PA	EMPLOYED PART TIME	UN-EMPLOYED	PURSUING ADVANCED DEGREE	MILITARY SERVICE	OTHER ACTIVITY
STATE-RELATED											
	#	408	230	123	0	0	0	0	26	25	4
	%		56.4	30.1	.0	.0	.0	.0	6.4	6.1	1.0
	%	353	65.2	34.8	.0	.0	.0	.0			
STATE-AIDED											
	#	1,354	583	588	9	33	6	20	89	23	3
	%		43.1	43.4	.7	2.4	.4	1.5	6.6	1.7	.2
	%	1,239	47.1	47.5	.7	2.7	.5	1.6			
PRIVATE INSTITUTIONS											
	#	347	237	40	11	0	4	19	5	4	27
	%		68.3	11.5	3.2	.0	1.2	5.5	1.4	1.2	7.8
	%	311	76.2	12.9	3.5	.0	1.3	6.1			
TOTAL											
		2,109	1,050	751	20	33	10	39	120	52	34
			49.8	35.6	.9	1.6	.5	1.8	5.7	2.5	1.6
		1,903	55.2	39.5	1.1	1.7	.5	2.0			

* PERCENTAGES MAY NOT ADD TO 100 DUE TO ROUNDING ERROR

At the master's degree level, Table 7.0 indicates that graduates of the state-aided colleges and universities had the highest rate of full-time, degree-related Civilian Labor Market employment, i.e., 94.1 percent.

Graduates with a doctorate from the various higher education sectors also varied with respect to full-time, degree-related, Civilian Labor Market employment with graduates of the state system of higher education (100.0%) and of the state-aided colleges and universities (100.0%) having the highest rates and the graduates of the private colleges and universities (84.8%) and the state-related (91.0%) universities having the lowest rates.

Finally, inspection of Table 7.0 indicates that, for the first-professional, degree graduates, the highest rate of degree-related, Civilian Labor Market full-time employment (100.0%) was associated with the state-related universities while graduates of professional schools associated with the state-aided universities and the private colleges and universities ranked lower, i.e., 94.5 percent and 89.1 percent, respectively.

In terms of the proportion of full-time, degree-related employment in the Civilian Labor Market, the state-aided institutions ranked first at all degree levels except the associate degree, where the state system institutions ranked first.

SOME COMMENTS ON THE HIGHER EDUCATION SECTOR FINDINGS

The relatively consistent differences between the sectors at every degree level may be due to the unique mix of professional preparations characteristic of each sector. Differences in the way the data is gathered by institutions in each sector may also play a role, e.g., higher unemployment rates would be found where the postgraduate activity status of graduates is determined by the reporting institution very shortly after graduation. Finally, some of these institutional sectors may simply have more graduates in liberal arts and in other degree programs that do not lead directly to degree-related employment.

APPENDIX A

A LISTING OF TWO-DIGIT CIP CATEGORY DEFINITIONS[1]

Code	Title and Definition
01.	Agribusiness and Agricultural Production
	Instructional programs that prepare individuals to apply scientific knowledge, methods, and technical skills in support of agribusiness and agricultural activities concerned with the production and preparation of crops and animals, supplies and services, mechanics, and with the processing of products.
02.	Agricultural Sciences
	Instructional programs that describe the production, processing, and distribution of food and fiber.
03.	Renewable Natural Resources
	Instructional programs that prepare individuals for activities involving the conservation and/or improvement of natural resources such as air, soil, water, land, fish, and wildlife for economic and recreational purposes.
04.	Architecture and Environmental Design
	Instructional programs that describe methods to create, adapt, alter, preserve, and control man's physical and social surroundings.
05.	Area and Ethnic Studies
	Instructional programs that describe the history, society, politics, culture, and economics of a particular geographic region or population subset.
06.	Business and Management
	Instructional programs that describe the processes of purchasing, selling, producing, and interchanging of goods, commodities, and services in profit making and non-profit public and private institutions and agencies.

[1]Derived from Malitz, Gerald S., "A Classification of Instructional Programs," National Center for Education Statistics, U.S. Department of Education, 1981

07. Business and Office

Instructional programs that prepare individuals for a variety of activities in planning, organizing, directing, and controlling all business office systems and procedures. Includes instruction in preparing, transcribing, systematizing, and preserving written communications and records; preparing and analyzing financial records; collecting accounts and receiving and disbursing money; gathering, processing and distributing information and mail; operating office machines and electronic data processing equipment; storing, distributing and accounting for inventories of materials; operating telephone switchboards and delivering messages; and performing other business office duties.

08. Marketing and Distribution

Programs that prepare individuals for occupations directed toward the flow of industrial and consumer goods in channels of trade, or the provision of services to consumers or users. These programs are concerned with marketing, sales, distribution, merchandising, and management, including ownership and management of enterprises engaged in marketing. Instructional programs are designed to prepare individuals to perform one or more of the marketing functions such as selling, buying, pricing, promoting, financing, transporting, storing, market research, and marketing management with varying emphases on technical knowledge of products and services marketed, related communication and computation skills, and abilities and attitudes associated with human relations and private enterprise.

09. Communications

Instructional programs that describe the creation, transmission, and evaluation of messages.

10. Communications Technologies

Instructional programs that prepare individuals to support and assist communication professionals and skilled communication workers, i.e., programs that stress specialized, practical knowledge related to the mechanical, scientific, or technical aspects of communications.

11. Computer and Information Sciences

Instructional programs that describe the coding, processing, and storage of data through repetitious and highly complex mathematical operations at high speed, and in accordance with strictly defined systems and procedures.

12. Consumer, Personal, and Miscellaneous Services

Instructional programs that prepare individuals to provide a variety of services to individual consumers as well as to organizations such as businesses and industries.

13. Education

Instructional programs that describe the art or processes of imparting knowledge, developing the powers of reasoning and judgement, and preparing others intellectually for a more mature life.

14. Engineering

Instructional programs that describe the mathematical and natural sciences when gained by study, experience, and practice and then applied with judgement in order to develop ways to economically utilize the materials and forces of nature for the benefit of mankind.

15. Engineering and Engineering-Related Technologies

Instructional programs that prepare individuals to support and assist engineers and other related professionals. Programs that stress specialized, practical knowledge related to the mathematical, scientific, or technical aspects of engineering and related sciences.

16. Foreign Languages

Programs that describe the structure and use of language that is common or indigenous to people of the same community or nation, the same geographical area, or the same cultural traditions; including such features as sounds, literature, syntax, phonology, morphology, semantics, sentences, prose, and verse, as well as the development of skills and attitudes used in communicating and evaluating thoughts and feelings through the use of oral and written language.

17. Allied Health

Programs that prepare individuals to assist qualified health professionals in providing diagnostic, therapeutic, preventative, restorative, and rehabilitative services to patients in health care facilities, in the home, and in the community.

18. Health Sciences

Programs that describe the restoration or preservation of health through the use of drugs, surgical operations, manipulations, or other curative or remedial methods.

19. Home Economics

Programs that describe the relationship between the physical, social, emotional, and intellectual environment in, and of, the home and family and the development of individuals. Includes instruction in the natural and social sciences and humanities in the development of attitudes, knowledge, and abilities pertaining to clothing and textiles, consumer education, food and nutrition, home management, housing, human development and family studies, and institutional management.

20. Vocational Home Economics

Programs that emphasize the acquisition of competencies (including skills and job attitudes) needed for securing and holding paid employment at the entry and advanced levels, and/or preparing for advancement in occupations utilizing home economics education knowledge and skills. Vocational home economics education instruction programs are developed from home economics subject matter areas in order to meet the unique requirements of specific vocations. Such programs include: (1) services to individuals/families; (2) assistance to professional home economists and professional in fields related to home economics in industry, business, and public and private agencies; and (3) other services and/or assistance directly related to one or more of the home economics subject matter areas, offered in formal and/or informal settings combined with supervised laboratory and work experiences.

21. Industrial Arts

Programs that provide individuals with knowledge that: (a) pertains to a body of related subject matter, or related courses, that has been organized for the development of understanding about all aspects of industry and technology, including learning experiences involving activities such as experimenting, designating, constructing, evaluating, and using tools, machines, and processes; and that (b) assists individuals in making informed and meaningful occupational choices or which prepares them for entry into advanced trade and industrial or technical educational programs.

22. Law

Programs that describe the principles and procedures, in the form of legislation, decisions, regulations, and orders, that have been developed and enforced by institutions of government in order to maintain social order.

23. Letters

Programs that describe sounds, literature, syntax, phonology, morphology, semantics, sentences, prose, and verse, as well as develop skills and attitudes used in communicating and evaluating thought and feelings through oral and written language.

24. Liberal/General Studies

Programs that describe the foundation necessary for understanding self and society through an appreciation of the concerns of civilization and our common heritage.

25. Library and Archival Sciences

Programs that describe the knowledge and skills required to develop, organize, store, retrieve, administer, and facilitate the use of collections of information in such formats as books, documents, manuscripts, machine-readable data bases, filmed and recorded materials, specimens, and artifacts.

26. Life Sciences

Programs that describe the systematic study of living organisms.

27. Mathematics

Programs that describe the sciences of logical symbolic languages and their application.

28. Military Sciences

Programs that describe the causative factors and tactical principles of warfare, armed conflict, and defense.

29. Military Technologies

Programs that prepare individuals to undertake the broad range of technical tasks required to keep the armed forces combat ready. Programs stress specialized, practical knowledge related to the mechnical, scientific, or technical aspects of military science in a variety of areas such as military communications and weapons systems.

30. Multi/Interdisciplinary Studies

Programs whose components derive from two or more separate conventional academic instructional programs.

31. Parks and Recreation

Programs that describe the principles and procedures of providing parks and recreational facilities and services for the benefit of the general public.

32. Basic Skills

Programs that describe the fundamental skills a person is normally thought to need in order to function productively in society. (This code is not applicable to the higher education degree programs of this report).

33. Citizenship/Civic Activities

Programs that describe how individuals can facilitate governmental functions and contribute to the well-being of their community through civic action. (This code is not applicable to the higher education degree programs of this report).

34. Health-Related Activities

Programs that describe the promotion of the health of individuals. (This code is not applicable to the higher education degree programs of this report).

35. Interpersonal Skills

Programs that describe how to effectively live and interact with others, social organization, being a congenial friend and companion, establishing courses of action for others, and influencing others to follow. (This code is not applicable to the higher education degree programs of this report).

36. Leisure and Recreational Activities

Programs that describe the development of and appreciation for, and competency in recreational and leisure-related activities. (This code is not applicable to the higher education degree programs of this report).

37. Personal Awareness

Programs that describe a person's self-perception, values, attitudes, beliefs, and emotional responses. (This code is not applicable to the higher education degree programs of this report).

38. Philosophy and Religion

Programs that describe the critical examination of the categories for describing reality, the nature and contents of human experience, the methodology of rational inquiry and criteria of practice (Philosophy); and the investigation of organized forms, beliefs, and practices related to eternal principles or transcendent spiritual entities (Religion).

39. Theology

Programs that describe the practice and application of theological principles and procedures as they apply to the planning, managing, and organizing of religious activities.

40. Physical Sciences

Programs that describe inanimate objects, processes of matter, energy, and associated phenomena.

41. Science Technologies

Programs that prepare individuals to support and assist various scientists and engineers. Programs that stress specialized, practical knowledge related to the mechanical, mathematical, scientific, or technical aspects of various biological, physical, and nuclear sciences.

42. Psychology

Programs that describe the behavior and experience of people.

43. Protective Services

Programs that describe the principles and procedures for providing police, fire, and other safety services, and for managing penal institutions.

44. Public Affairs

Programs that describe the formulation, implementation, administration, evaluation, and management of public policies and programs, including those services which are directed toward the betterment of economic and social conditions.

45. Social Sciences

Programs that describe the substantive portions of behavior, past and present activities, interactions, and organizations of people associated together for religious, benevolent cultural, scientific, political, patriotic, or other purposes.

46. Construction Trades

Programs that prepare individuals to erect, install, maintain, and repair buildings, highways, airports, missile sites, and other structures using materials such as metal, wood, stone, brick, glass, concrete, and composition substances. Includes instruction in cost estimating, cutting, fastening, and fitting of various materials; in the use of hand and power tools; and in the following of technical specifications and blueprints.

47. Mechanics and Repairers

Programs that prepare individuals in the adjustment, maintenance, part replacement, and repair of tools, equipment, and machines.

48. Precision Production

Programs that prepare individuals to produce precision goods and materials by hand or machine. In many instances, instructional activities are designed to cultivate an ability to interpret detailed instructions and specifications, and to produce or manufacture goods at low levels of tolerance, i.e., with very little error or variability.

49. Transportation and Material Moving

Programs that prepare individuals to operate and to control equipment used to facilitate the movement of people or materials.

50. Visual and Performing Arts

Programs that describe the creation and perception of auditory, kinesthetic, and visual phenomena which express ideas and emotions in various forms, subject to aesthetic criteria.

APPENDIX B

POSTGRADUATE ACTIVITY TABLES AVAILABLE ONLY UPON REQUEST[1]

Appendix Table	Title
1.1	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Graduates in Pennsylvania, 1984.
1.2	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Baccalaureate Degree Graduates in Pennsylvania, 1984.
1.3	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Master's Degree Graduates in Pennsylvania, 1984.
1.4	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Doctoral Degree Graduates in Pennsylvania, 1984.
1.5	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of First-Professional Degree Graduates in Pennsylvania, 1984.
2.1A	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associated Degree Recipients From Reporting State System Institutions in Pennsylvania, 1984.
2.1B	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Baccalaureate Degree Recipients From Reporting State System Institutions in Pennsylvania, 1984.
2.1C	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Master's Degree Recipients From Reporting State System Institutions in Pennsylvania, 1984.
2.1D	A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Doctoral Degree Recipients From Reporting State System Institutions in Pennsylvania, 1984.

[1]Equivalent versions of Appendix Tables 1.1 through 2.4C are also available at the six-digit level of analysis but it should be remembered that the number of reported graduates for a given degree field would be even smaller than that found at the four-digit level of analysis making the reliability and sampling adequacy of the results even more problematic.

2.2A A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Recipients From Reporting State-Related Institutions in Pennsylvania, 1984.

2.2B A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Baccalaureate Degree Recipients From Reporting State-Related Institutions in Pennsylvania, 1984.

2.2C A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Master's Degree Recipients From Reporting State-Related Institutions in Pennsylvania, 1984.

2.2D A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Doctoral Degree Recipients From Reporting State-Related Institutions in Pennsylvania, 1984.

2.2E A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of First-Professional Degree Recipients From Reporting State-Related Institutions in Pennsylvania, 1984.

2.3A A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Recipients From Reporting State-Aided Institutions in Pennsylvania, 1984.

2.3B A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Baccalaureate Degree Recipients From Reporting State-Aided Institutions in Pennsylvania, 1984.

2.3C A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Master's Degree Recipients From Reporting State-Aided Institutions in Pennsylvania, 1984.

2.3D A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Doctoral Degree Recipients From Reporting State-Aided Institutions in Pennsylvania, 1984.

2.3E A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of First-Professional Degree Recipients From Reporting State-Aided Institutions in Pennsylvania, 1984.

2.4A A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Recipients From Reporting Private Institutions in Pennsylvania, 1984.

2.4B A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Baccalaureate Degree Recipients From Reporting Private Institutions in Pennsylvania, 1984.

2.4C A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Master's Degree Recipients From Reporting Private Institutions in Pennsylvania, 1984.

2.4D A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Doctoral Degree Recipients From Reporting Private Institutions in Pennsylvania, 1984.

2.4E A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of First-Professional Degree Recipients From Reporting Private Institutions in Pennsylvania, 1984.

2.5A (This Table is not available for the Associate Degree Graduates of 1984 since there were no reporting Junior Colleges in 1984)

2.6 A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Recipients From Reporting Community Colleges, 1984.

2.7 A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Employment Status of Associate Degree Recipients From Reporting Proprietary Schools in Pennsylvania, 1984.

2.8 A Complete Four-Digit Degree Program Breakout of the Postgraduate Activity and Civilian Labor Market Status of Associate Degree Recipients From the State School of Technology (Thaddeus Stevens) in Pennsylvania, 1984.